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# THE ROYAL COMMISSION

## ON

# ELECTRIC POWER PLANNING

*Preliminary Meetings of the Royal  
Commission on Electric Power Planning*

**DATE:** Nov. 5, 1975

**TIME:**

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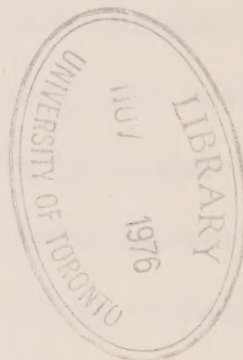
ON

ELECTRIC POWER PLANNING

Meeting held at Sault Ste.  
Marie, Ontario, on November  
5th, 1975.

CHAIRMAN: ROBERT E.E. COSTELLO, ESQ.

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MEMBERS OF THE COMMISSION:

DR. ARTHUR PORTER	CHAIRMAN
ROBERT E.E. COSTELLO, ESQ.	MEMBER
MME. SOLANGE PLOURDE-GAGNON	MEMBER
DR. WILLIAM M. STEVENSON	MEMBER









SUBMISSIONS

THE PUBLIC UTILITIES COMMISSION OF THE CITY  
OF SAULT STE. MARIE - H.L. HARRIS, MANAGER.

I would like to say that we are very  
pleased to have the opportunity to talk about some  
of our concerns, I think concerns which have been  
expressed by you Bob in your introduction.

I guess we all have them, and perhaps  
those who are supplying energy have concerns in a  
little different sense, than others, but nevertheless  
they all boil down to the same basic concern, on  
how are we going to be able to supply energy, and  
what energy requirements are we going to need to  
supply.

1. We are concerned by the somewhat  
contradictory approach which is prevalent in reports  
emanating from Energy Board hearings and from some  
political leaders as compared with statements  
from those who have specialized knowledge of the  
electrical energy field, including the provincial  
municipal utilities organization. On one hand  
there seems to be an attempt to minimize the need  
for expansion of our electrical system throughout  
the province, by the limitations suggested for









1 Ontario Hydro rate increases. On the other hand  
2 specialists in the electric field suggest to us  
3 that with the known resources of fuels as they  
4 are today there is likely to be a trend towards the  
5 use of more electrical energy for such purposes  
6 as home and office heating. If this is in fact  
7 true, energy demands may increase drastically  
8 and along with them the need for major increases  
9 in capital for enlarging the system.

10 2. We are concerned about the  
11 need for a national energy policy which would suggest  
12 best uses for different types of fuels - a policy  
13 which would probably do a great deal to answer  
14 questions raised in the preceding paragraph.  
15 In the matter of conservation, electrical energy  
16 seems to have received the greatest attention. It  
17 is difficult for us to conceive of any successful  
18 energy conservation program which can consider one  
19 type of energy in isolation from all others.

20 3. By inference, the suggestion  
21 seems to occur repeatedly in the news media that  
22 Ontario Hydro, by limiting the expansion of its  
23 facilities, can reduce the demand for electricity.  
24 We believe that if there is to be any reduction  
25 in the rate of increased demand, the public will  
have to drastically change its ideas - that Ontario







1 Hydro, to act responsibly, must continue the practice  
2 followed since its inception, of meeting the demands  
3 of the public. To date there has been very little  
4 indication that the public are prepared to limit  
5 their requirements.

6 There has been a great deal of  
7 pressure brought to bear on Ontario Hydro to reduce  
8 its reserve capacity and thus allow some temporary  
9 slowdown in the rate of expansion. Ontario Hydro  
10 contends that this reserve capacity is necessary  
11 to meet the level of service expected by the public.  
12 We believe this to be true and have seen no indication  
13 that the public is prepared to accept a lesser  
14 degree of service reliability. In fact, our  
15 experience indicates that a higher degree of  
16 reliability is expected today than has been the case  
17 in the past. Reliability of service becomes more  
18 important each day in our electrified and mechanized  
19 society with respect matters of safety such as street  
20 lighting - traffic control - elevators.

21 5. Although we appreciate the  
22 need for environmental control in matters dealing  
23 with Hydro expansion, just as there is a need for  
24 its consideration in any industry, we are concerned  
25 about what seems to be a serious disregard for the  
costs of this control. We believe there is a







1 real need for the projected expense associated with  
2 control measures, and with costly hearings and in-  
3 vestigations, to be made public so that a proper  
4 evaluation can be made of the alternatives by those  
5 who have to pay for them. Contrary to the majority  
6 rule concept of our democratic society, a great deal  
7 of the agitation for action from the environmental  
8 standpoint seems to come from minority groups. If  
9 costs were associated with the proposed action,  
10 we think the decision on that action would  
11 rightfully be made by the majority. In considering  
12 expense the matter of increased costs arising out  
13 of delays in construction which result from hearings  
14 and investigations should be recognized for the  
15 important factor which it is.

16 In most cases I think it is difficult  
17 for the public to recognize that time is important  
18 when we are talking about a project that is to happen  
19 10 years from now. It is difficult for all of us to  
20 recognize that there needs to be immediate action.  
21 Yet there is need for immediate action, and specific  
22 commitments have to be made to allow that work to  
23 proceed. I think if I recall correctly, Ontario  
24 Hydro said the delay of the Darlington Nuclear  
25 Station one year, would cost \$500 million, additional







1 cost for fuel and energy.

2 That is \$500 million, and that is  
3 certainly a long way from, what's a million concept,  
4 we heard about years ago.

5 6. We depend on our supplier and  
6 in turn on Ontario Hydro, to provide us with an  
7 adequate supply of power to meet the requirements  
8 of our customers. Since the peak power requirements  
9 of the north-eastern part of the province cannot  
10 now be met by generation available in the same area,  
11 we see the proposal of Ontario Hydro to construct a  
12 nuclear generating station on the North Channel as  
13 being a logical step. The people of Sault Ste.  
14 Marie have benefited over the years as a result  
15 of the availability of lower cost hydraulic energy  
16 from the Great Lakes Power Company. Although the  
17 present day cost of money has made the development  
18 of high capital cost hydraulic generation much less  
19 attractive, it seems likely that in the future,  
20 energy produced by hydraulic means may still be  
21 economically attractive. We feel that if economic  
22 factors permit, opportunity should be provided for  
23 the development of the remaining hydraulic power  
24 available on the St. Marys River, and in the Algoma  
25 area.







1                   Although, as a municipal utility  
2 responsible for electrical subtransmission and  
3 distribution only, we do not have quite the same  
4 requirements for advance planning as does Ontario  
5 Hydro, with its need for planning generation,  
6 it is obvious that future load growth can seriously  
7 affect present day planning and it is also obvious  
8 that we too must look 10 to 15 years ahead if we are  
9 to plan a system which is technically and economically  
10 sound. It is our opinion that with energy resources  
11 being limited, the establishment of an overall  
12 energy policy should receive priority and that the  
13 establishment of this policy is necessary for  
14 reasons of conservation and economic use.

15                   THE CHAIRMAN: Thank you. Do you have  
16 any questions?

17                   DR. STEVENSON: I have one or two,  
18 Mr. Harris. I wonder if you can tell us what the  
19 rate of load growth in Sault Ste. Marie has been  
20 over the last few years?

21                   MR. HARRIS: The rate of load growth in  
22 the Sault has been approximately the same as  
23 throughout the rest of the country. We are talking  
24 about 6 to 7% on the average.

25                   DR. STEVENSON: And does that include







1 the Industrial Algoma?

2 MR. HARRIS: This, I am speaking mainly  
3 from the point of view of our own load, which does  
4 not include major industry. I think that may not  
5 necessarily be true of Algoma.

6 DR. STEVENSON: The other point  
7 that -- one or two other points of interest to me.  
8 You commented that there has been very little  
9 indication that the public are prepared to limit  
10 their consumption of electrical energy.

11 You are basing this comment, I suppose,  
12 on your own experience as a manager here?

13 MR. HARRIS: And perhaps what I see  
14 around my home. I'm not sure.

15 I don't think we have had any  
16 indication that there has been any readiness to cut  
17 back on the amount of energy being used by  
18 individuals. Other than there certainly has been,  
19 on some occasions, indications that they may be  
20 turning off more lights than usual, but as far as  
21 really reducing the quality of our life style,  
22 of being prepared not to have some of the luxuries  
23 which we have available for us today, or increasing  
24 them, I have not seen any difference in that.

25 DR. STEVENSON: I have scanned the  
letters to the Ministry of Energy, Dennis Tyndall,







1 from the people of Ontario, in connection with  
2 Hydro's 25% rate increase, and I was struck by  
3 the number of people that commented that they would  
4 be prepared to limit their own sort of personal  
5 rate of electricity consumption, if Hydro would  
6 restrain its rate of growth, and therefore the  
7 rate increases.

8 You know, this is to be proved, but  
9 there is an impression, a wide spreading feeling it  
10 seems to me, from reading those letters, that people,  
11 if they felt they could keep their rate increases  
12 in check, would do more than they had in the past,  
13 by restraining their own increasing consumption.

14 MR. HARRIS: Yes, I would wonder if  
15 we could get the general acceptance of that approach.  
16 This could be quite true. I just have not had any  
17 opportunity, to see this happening. I suspect that  
18 it could happen if it is promoted, much more quickly  
19 than if it's not promoted, and this could make a  
20 very large difference.

21 DR. STEVENSON: Are you still permitting  
22 electricity up here?

23 MR. HARRIS: Not permitting electricity,  
24 but I mean permitting conservation of electricity,  
25 and promoting the reduction, or the acceptance of  
fewer appliances, or the fact that we will not want







1 any more new appliances in the future. It would  
2 be a big step in that direction.

3 THE CHAIRMAN: Thank you, Mr. Harris.  
4 One of the things that has come up, Mr. Harris, in  
5 my travels around is water heaters. And in some  
6 areas. In the area I am in at home, the water heaters  
7 are turned off in peak power periods. This does  
8 bring the peak down. I am told in London by the  
9 PUC men that is very expensive. However, it may  
10 not be as expensive as installing a generating  
11 facility to provide that particular portion of the  
12 peak. This is one thing I think we have to take  
13 a look at.

14 MR. HARRIS: Well, we use that practice in  
15 the Sault. I don't know whether we had this when  
16 you lived here or not. We can certainly say that  
17 it has meant a considerable saving I am sure Great  
18 Lakes will attest to.

19 THE CHAIRMAN: This is not universally  
20 used across Ontario?

21 MR. HARRIS: No, it isn't. Can I  
22 make one point on that for the record.

23 THE CHAIRMAN: Yes.

24 MR. HARRIS: That there is a definite  
25 trend to place less importance on the kilowatt demand,  
as you know, and more on the kilowatthour, and this





1 of course provides less incentive for having a  
2 control system.

3 THE CHAIRMAN: I do know that Hydro  
4 has been around talking various changes in pricing  
5 practices to heavy industry, such as the more you  
6 use, the more you pay.

7 There are things they can do. Great  
8 Lakes are doing it here right now, they have a certain  
9 energy level at certain times of the day.

10 DR. PORTER: Mr. Harris, I am interested  
11 to hear about the increase in demand. I was told by  
12 somebody today that the population in the Sault; in  
13 this area, has been reasonably constant for quite  
14 a few years. Since you are not including the  
15 industrial component, I wonder if you would like to  
16 comment on why you think this 6 to 7% per annum  
17 increase has come about.

18 On the one hand, people are trying  
19 to conserve; on the other hand, presumably there  
20 are not too many new homes being built, and there-  
21 fore it seems slightly paradoxical that you managed  
22 to increase it.

23 MR. HARRIS: I think there are two  
24 factors. One factor is we all use more energy every  
25 year.







1                   The other is, the number of customers  
2                   increase each year.

3                   We have not really been able to answer  
4                   this question that you pose, of why the load is  
5                   increasing at this rate, when the population does  
6                   not seem to be increasing. But really, the City  
7                   Hall people have not been able to really conclude  
8                   exactly what the population increase has been. As  
9                   I understand it, there is some contradiction.

10                  THE CHAIRMAN: Thank you very much  
11                  Hugh.

12                  MADAME GAGNON: You talk about the need  
13                  for environmental control, and you mention the  
14                  agitation for action from the environmental stand-  
15                  point.

16                  MR. HARRIS: I am sorry, I didn't  
17                  hear the question.

18                  MADAME GAGNON: Item 5, you mention  
19                  the agitation for action from environmental control.  
20                  It seems to come from the minority groups.

21                  MR. HARRIS: Well, I think this is  
22                  probably the way that any agitation starts, it is  
23                  normally a small group, and I think the only thing  
24                  that I would like to point out here is that associated  
25                  with the cost of the Inquiries, and investigation,







1 and studies which come from these questions with  
2 regard to environmental control, should be some  
3 costs, there should be some costs associated with  
4 them, so that we can decide; is it worth it, or isn't  
5 it worth it. We seldom hear that really. We just  
6 get into it and that's the way it goes. So that  
7 the production of the generating facilities is delayed  
8 a year, so that't the way it goes. I think it is  
9 important that we have more emphasis on these costs.

10 THE CHAIRMAN: Thank you very much,  
11 Mr. Harris. We will now hear from Mr. Ralph Thomas,  
12 From the Broken Quarter Association.

13 MR. THOMAS: Mr. Chairman, and Members  
14 of the Commission.

15 The task facting the Royal Commission is  
16 a formidable one. The problem of assessing our  
17 province's future energy needs is difficult and  
18 complex. If the Commission is to succeed, every  
19 aspect of electrical power usage and development  
20 must be examined thoroughly as part of a total  
21 composite problem.

22 To do such a momentous job, the  
23 Commission cannot examine individual areas and  
24 problems as if they were unrelated and independent.  
25 Accordingly, we believe it is imperative that the  
Commission order a freeze on all priority projects,





1 including the planned North Shore generating station,  
2 pending full study of Ontario's energy needs and the  
3 final report.

4 There are several reasons this freeze  
5 on development is necessary and we urge the Commission  
6 to consider each of them carefully.

7 1. A re-evaluation should be done  
8 of Hydro's projected need of seven percent compounded.  
9 Until this information is available it would not be  
10 logical to increase generating capacity.

11 (a) If the prediction of seven  
12 per cent is too high, then Hydro's priority projects  
13 are no longer rush issues deserving advance  
14 consideration.

15 (b) A study into the possible  
16 effects of an educational program on energy con-  
17 servation could indicate a growth rate well below  
18 seven per cent.

19 (c) The effects of rate increases  
20 on demand could effect growth in energy consumption.

21 (d) The actual users of electrical  
22 power should be considered when assessing needed  
23 growth. Should answers in this area indicate that  
24 any part of Hydro's increased capacity is for export,  
25 then a decision not to allow further exports would  
result in lower future demand. The idea of







1 exporting power at the expense of our environment  
2 is untenable.

3 2. The level of generating capacity  
4 above peak demand that Hydro maintains is required as  
5 a safety margin should be re-examined.

6 (a) A decision that a lower safety  
7 margin would be acceptable, would immediately reduce  
8 the urgency of the priority projects and would lower  
9 the amount of generating expansion needed.

10 (b) If ways can be found, as they  
11 should, to reduce the peak demand, which occurs from  
12 four - six p.m. daily, corresponding reductions  
13 would result in long-term requirements of generating  
14 capacity. Early approval of even one of the priority  
15 projects could sabotage this part of the Commission's  
16 research.

17 3. The question of large "energy  
18 farms" as compared to smaller generating stations  
19 close to demand areas should be resolved.

20 (a) Bigness is not necessarily best,  
21 and because of the great distances involved in this  
22 province, perhaps greater consideration should be  
23 given to smaller dispersed units.

24 (b) If future industrial expansion  
25 is not planned for this geographic region then power







1 generation should not be here either. Should a  
2 northern plant be approved, further study of this  
3 question by the Commission would be useless.

4 4. The effects of wide trans-  
5 mission corridors across both valuable forest land  
6 and farm land should be examined prior to granting  
7 permission to locate a generating station a great  
8 distance from actual need. Again early approval of the  
9 priority items would render these studies superfluous.

10 5. Environmental questions will  
11 certainly be raised. To establish at later hearings  
12 that total environmental effects such as air and  
13 water pollution are more serious from large generation  
14 farms than from small plants would be meaningless  
15 if the huge energy farms were already a reality.

16 6. The social and economic impact  
17 of huge expenditures both during and after a short  
18 construction period must be evaluated. Studies  
19 on the quality-of-life changes in an area are only  
20 valid if done prior to the start of a project.

21 7. It is essential that adequate  
22 time is allowed for necessary studies to be completed.

23 (a) Intervenors need to have a  
24 fair chance to support or challenge Hydro's proposals.  
25 An early decision on the priority projects will not





1 permit these groups or individuals time to react.  
2 Hydro has had considerable lead time to prepare  
3 its position and others deserve an equal time. It  
4 has been suggested that public funds will be available  
5 for meaningful research by intervenors, but to grant  
6 funds without the time would be ridiculous.

7 (b) Time is needed to compare  
8 the long-range benefits and disadvantages of both  
9 fossil and nuclear fuel before a North Shore plant  
10 is approved. Only after extensive investigation  
11 and discussion can the better fuel be chosen.

12 (c) Development must be frozen  
13 to provide time for projecting the effect of rate  
14 increases required in the process of financing  
15 capital expenditures on the general rate of inflation  
16 and thus the whole economy, especially if it can be  
17 shown that the increased generating and transmission  
18 capacity will be used for export sales.

19 (d) Time is required to study the  
20 relationships of Hydro's projected plans/<sup>to</sup>current  
21 studies being done on recreational use of Great Lakes  
22 frontage areas. To allow Hydro to proceed on a site  
23 before the recreational study is complete would  
24 render the study useless and would waste the time  
25 and money already spent.







8. Permission to proceed

pending final approval must be granted. Once started the momentum of the project would be hard to stop. Residents could be faced with another "Pickering Airport" in which considerable destruction is caused before the project is scrapped.

It is unlikely that the Commission could come to satisfactory conclusions on all the issues raised above before all of the hearings are completed. Therefore, it seems obvious that the Commission should not make decision on the priority items before their final report is tabled. Rather they should order a freeze on further development until their work is complete.

Other issues should be examined by the Commission.

(1) Hydro's method of site selection and development must be examined.

(a) In its preliminary submission of May 1, 1975, to this Royal Commission, Hydro indicates that two - four additional stations may also be introduced as priority items (page 21, Section 2.2). Hydro appears to be "running scared" in attempting to get early approval for projects without having to submit these proposals to overall study in the hearings.





1 (b) Since Hydro announced consideration  
2 of three areas for possible generating sites on the  
3 North-Shore, rumors have persisted that Hydro had  
4 already selected the Dean Lake area and had in fact  
5 been acquiring property. The Commission should be  
6 able to either confirm or dispel these rumors. If  
7 the rumors should be true then inclusion of the other  
8 two areas has seriously misled the public and Hydro's  
9 action would be inexcusable.

10 (2) Hydro's accountability should  
11 be examined. With a full-time research staff, why was  
12 the public and now the Commission suddenly faced with  
13 "priority" projects that cannot wait for a full-length  
14 study? Have Hydro officials been lax in planning,  
15 or is it part of their planning to attempt to rush  
16 us into a decision? Both possibilities bear  
17 examination.

18 (3) Hydro's request in the May  
19 submission (page 40) to have only limited public  
20 funds for intervenors during the hearings should make  
21 their motives suspect. Surely if their plans are valid,  
22 public scrutiny should not concern them.

23 (4) Hydro's method of providing  
24 public participation in planned projects should be  
25 studied. At the one-and-only public meeting at







1 Thessalon concerning North Shore development, it  
2 appears the public was deliberately deceived. The  
3 meeting was billed as an "information" meeting, but  
4 the Hydro spokesman's opening remarks asked for  
5 written briefs. It was quickly established that  
6 no further public meetings for the "informed"  
7 public to present briefs were to be held. The  
8 three-hour meeting was abruptly closed while many  
9 persons in the standing-room-only crowd indicated  
10 they had more questions to raise the issues that  
11 concern them.

12 (5) The Commission should  
13 examine the feasibility of other methods of cooling  
14 generating plants and possible uses of waste heat.

15 (a) If alternate means could be  
16 developed other than the use of tremendous volumes  
17 of water then new stations would not require  
18 irreplaceable shoreline property.

19 (b) Possible uses of rejected  
20 heat from power plans could dictate that the location  
21 of these future centres be near major industrial  
22 or residential centres.

23 (6) There should be a broad  
24 consideration of Hydro's responsibilities. It should  
25 be clearly their responsibility to undertake priority  
studies on other sources of energy. Perhaps it might





1 be better to spend large sum of money developing other  
2 sources rather than spending the same funds defending  
3 their present policies.

4 (7) Consideration should be  
5 given to holding hearings in specific areas where  
6 local issues are under debate. To hold hearings  
7 only at Sault Ste. Marie and Sudbury will require  
8 residents of the North Shore to travel up to 200  
9 miles round trip to attend the hearings. If the  
10 Commission truly wishes public involvement, it must  
11 go to the people rather than ask the citizens to  
12 come to it.

13 (8) The format of the actual  
14 hearing will be hard to define in advance; however  
15 an attempt should be made.

16 (a) It is clear that competent  
17 parties should be able to cross-examine any testimony  
18 given.

19 (b) Anyone present should be able  
20 to pose questions on any of the issues raised.

21 (c) A framework must be established  
22 to allow any and all interested parties to either  
23 give testimony or question it.

24 (d) It is difficult if not  
25 impossible to establish whether testimony or  
questioning will be meaningful in advance; however,







1 no person or group should be allowed to unduly delay  
2 the hearings by any form of filibustering.

3 (e) Just as filibustering should  
4 not be allowed, neither should there be any mechanism  
5 that an intervenor can use to effect closure or to  
6 block inclusion of a specific topic.

7 (f) The hearings must be kept  
8 as informal as possible and legal technicality avoided.  
9 This is particularly necessary if the ordinary person  
10 is to have a fair chance to take part. The use of  
11 legal technicality will not hinder Ontario Hydro or  
12 other growth-oriented intervenors.

13 Finally, we believe that if the work of  
14 the Commission is not to be an empty ritual, it should  
15 immediately undertake a full and serious assessment  
16 of technical, economic, social and ecological benefits  
17 of using energy sources such as the sun, the wind and  
18 hydrogen as alternatives to nuclear and fossil in  
19 adding to Ontario's supply of power. Such an assess-  
20 ment will be vital for our own welfare and that of  
21 our descendants, and Hydro's expansion should not  
22 be allowed to continue as if the Royal Commission did  
23 not exist.

24 Our group wishes the Commission every  
25 success. We particularly welcome the opportunity to





1 discuss broad energy policy as well as local site  
2 selection and we pledge our support toward achieving  
3 the aims and objectives of this Commission in this  
4 difficult task that lies ahead.

5 THE CHAIRMAN: Thank you. I don't  
6 believe it is our mandate to dictate to Hydro how  
7 they should run their own public participation meetings.  
8 It's really not within our terms of reference, as I  
9 see it.

10 MR. THOMAS: Is it not in your terms of  
11 reference to enquire as to how they do it?

12 THE CHAIRMAN: We know how they do  
13 it, whether they are doing it effectively or not.  
14 We have no control on Hydro, we are completely  
15 independent of them, we are independent of any  
16 political party and Hydro.

17 However, the Commission has been asked  
18 to rule on the need. Say for instance, say it did  
19 happen that the Commission ruled yes on the need for  
20 a generating station; that does not mean that Hydro  
21 could go out and build a generating station, they  
22 have to comply with all the provisions of the  
23 Environmental Act.

24 MR. THOMAS: I wasn't aware of that.

25 THE CHAIRMAN: With regard to holding  
hearings, and priority hearings, I am sure we won't







1       only be in Sudbury and Sault Ste. Marie. There are  
2       a lot of other people involved, we know that.

3               The need for the Commission to under-  
4       take long term research, and that I think is something  
5       the Federal Government should be working on, and I  
6       think they are certainly, well, Dr. Porter knows,  
7       there is a lot of restrictions on the solar energy,  
8       right now. How much is going on in Canada, this  
9       of course we have to find out.

10              Dr. Porter, would you like to say  
11       something?

12              DR. PORTER: I am very impressed  
13       with this brief. I think you have explored the  
14       topic in considerable depth, and I think you have  
15       followed very much, the path that we hoped people  
16       would follow.

17              In other words, these preliminary  
18       public meetings are for the identification of issues  
19       as we have said, and for ideas relating to the  
20       format. You have done this very, very effectively  
21       I would say.

22              I think your comment about the meetings,  
23       perhaps are meetings being held just in Sudbury, and in  
24       the Sault, causing some people to come 200 miles,  
25       has been very well taken. When we originally planned





1 the preliminary public meetings, believe it or not  
2 we had 60 locations, and then we looked at the  
3 logistics of this. We thought, gee, just to identify  
4 the issues, it looks as though we are going right  
5 through to next March, because we are finding three  
6 days a week of this activity, combined with getting  
7 together the briefs, and our own analysis of them is  
8 quite a project. So what we had to do obviously  
9 was to say how can we perhaps cover the province as  
10 a whole, get to each geographical region, and say  
11 then come up with an interim report, in which the  
12 issues which have been identified, that they will  
13 be of course outlined in this report.

14 Now, if this is not a complete list,  
15 then people can tell us, you know, where they think  
16 we should have added or deleted items. So that I  
17 don't want you to think that by any means we are  
18 ignoring an area by just doing this; because as  
19 Bob very rightly says, when it comes to the special  
20 meetings and hearings on the priority project, very  
21 clearly these will be in those areas which are  
22 relevant to the particular issues.

23 So I thought I would like to clear up  
24 that question. The extent to which the Commission,  
25 as you have suggested, might delay and put a freeze







1 on all priority projects really of course, goes  
2 beyond our terms of reference, which are very specific;  
3 it says, to report on a priority basis.

4 Now, the Commission would perhaps  
5 agree with you, that it would be very good if time  
6 permitted, to hold systemic analysis, to see how  
7 this fitted. There is no question.

8 On the other hand, we believe, and  
9 our studies, major studies are present in hand,  
10 in connection with the priority project. Quite  
11 independent of any studies that Hydro has undertaken.  
12 So that we believe, and hopefully by the time the  
13 hearings take place in March, perhaps in April, that  
14 we will be able to come up perhaps with some viable  
15 conclusion, that conclusion might be that we regret  
16 that we cannot recommend yeah or nay. This might  
17 happen, because we haven't had opportunity to get  
18 on the system as a whole.

19 As I said before, I think your brief  
20 is a very excellent one, and we are very grateful.

21 FROM THE FLOOR: Mr. Chairman, perhaps  
22 you can harness some of the energy in the other room.  
23 Perhaps that is outside the terms of reference of  
24 the Commission.

25 Dr. Porter said something, and I didn't





1 hear it, and I don't want you to repeat all of  
2 it. You mentioned one specific thing about the terms  
3 of reference.

4 DR. PORTER: Yes, I remember. I  
5 think I was only hesitating because I thought there  
6 might be another outpouring of energy.

7 What I said, that we have got to  
8 interpret of course the terms of reference, literally,  
9 as put to us. The only way they can be changed is  
10 through another Order in Council, effectively.

11 Now, what I said was, that since we  
12 had been specifically, we are specifically required  
13 to report on a priority basis, on these items, then  
14 that is loud and clear and we will do our best to  
15 fulfill that requirement. I think that was the point.

16 MME. PLOURDE-GAGNON: In the beginning  
17 you mentioned the Royal Commission is a fantastic one.  
18 Thank you. I like to add it's even more than that.  
19 This Commission is unique because it involves direct  
20 the people in their public participation problem,  
21 and public fund, and business.

22 DR. STEVENSON: I want to share the  
23 views of my colleagues. This brief is a thoughtful  
24 brief, and the issues you raise are reasonable  
25 issues. Some are very familiar to people that have





1 observed the public dialogue that Hydro, that has  
2 taken place at the Energy Board level.

3 It is interesting to observe that  
4 Donald MacDonald, who is chairing the Select Committee  
5 of the Legislature to examine the Hydro rate increase,  
6 has singled out this issue of generated reserve  
7 margin, as one of the things he would like the  
8 Legislative Committee to look at, this Legislative  
9 Session.

10 These do represent areas, clearly,  
11 where there might be some give in the system, and  
12 will be prepared to live more dangerously, and to  
13 suffer the occasional frown - out in the province,  
14 we can save some money.

15 Your comment about export power, often  
16 raised in our hearings in the various cities,  
17 particularly in Windsor. I suppose the same principle  
18 perhaps is here in the Soo, people know that Ontario  
19 Hydro exports a great amount of electricity, and they  
20 ask themselves; well now, are they building capacity  
21 for export? Hydro says no they are not exporting  
22 out of their reserves. This is a secondary market,  
23 and they are not building any plant to supply  
24 this.

25 These are issues that are clearly in  
our terms of reference, and the Commission has been







1 specifically asked to review export policy.

2 I don't have any specific observations  
3 other than this.

4 Thank you for your brief, and I hope  
5 that when we re-appear on the North Shore and review  
6 the priority problems, that you will be there and  
7 we will have another well documented presentation  
8 at that time.

9 Thank you.

10 THE CHAIRMAN: Thank you very much,  
11 Mr. Thomas. We would now like to hear from Great  
12 Lakes Power.

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1 MR. HOGG: We do appreciate the  
2 opportunity to place before you a preliminary  
3 submission. I will give you a brief resume of our  
4 history, and our purposes of our operations. And  
5 probably a very brief resume of what our expectations  
6 will be for the future.

7 Also to support Ontario Hydro in its  
8 short and long term planning for future generation  
9 and transmission in Ontario.

10 Now, I don't propose to cover, this  
11 is single spaced rather than Hugh's double, I have  
12 seven pages here. It was put together only this  
13 afternoon, because we had been living in a state of  
14 flux lately, in an attempt to budget. I have  
15 received pros and cons of the deliberations of the  
16 Energy Board and this is in abeyance, and we have  
17 something else, and of course we have been obliged  
18 to inform several of the major customers what their  
19 rates will be January 1st, 1976, and this we have  
20 done.

21 Beginning with Thanksgiving Day, we  
22 have been bombarded and preoccupied with the  
23 implications of certain confusing legislation of  
24 restraint. Subsequently we have been reassured  
25 that designated exceptions may be allowed and  
possible revisions implemented to satisfy specific







2.2 1 or unforeseen instances. In other words, man-made  
2 laws may be legislated and amended to satisfy the  
3 apparent needs, or alleged needs, of the day. However,  
4 there are laws not subject to amendment -- natural  
5 laws. Currently we are experiencing the unrelenting  
6 influence of one such law; for as Greek philosopher  
7 Heraclitus stated 2,500 year ago, "All things,  
8 going upward or downward, are in a state of flux."  
9 As we are bound to live under a constant state of  
10 change, it would follow that the only control we  
11 might exert is one of direction -- backward or,  
12 hopefully, forward, If we do not choose to progress,  
13 then we will regress.

14 Acknowledging an understandable  
15 restraint and natural resistance to change,  
16 particularly from a way of life which has been  
17 familiar and comfortable, it is a wise and healthy  
18 decision to look ahead to ways to guarantee and  
19 hopefully enhance our life style. As Robert  
20 Browning said for us, "Progress is the law of life."

21 However, progress is only possible if  
22 man is permitted, within definite guidelines to choose  
23 his direction. If outside influences, not properly  
24 directed or informed, are allowed to bring about  
25 undue pressures. Parkinson's Law of Delay becomes





1 involved; that is, "Delay is the deadliest form of  
2 denial."

3 Now, I have covered here something  
4 of Great Lakes.

5 In ratio of size Great Lakes Power  
6 Company's problems are as arduous and complex as  
7 those of Ontario Hydro. Planning and programming  
8 applied by the Power Company to the basic criteria  
9 of constructing, maintaining and operating a  
10 power system have functioned well to date. However,  
11 the climate has changed. There has never been a  
12 time when the future has been so unpredictable.  
13 Cost, available resources and environmental Impact  
14 augment the difficulties of planning future  
15 facilities to meet the ever growing demands for power.  
16 The projects that we are currently exploring, if  
17 developed, would cost in the order of eight hundred  
18 to one thousand dollars per kilowatt in 1976 dollars.  
19 This may not be low cost power for the next three  
20 or four years. However, with the escalating cost  
21 of other forms of energy, we believe we would be safe  
22 in prophesying it eventually will be low cost energy.

23 In this day of anxiety for the impact  
24 development could make on the ecology, it is  
25 understandable that concerned voices should be





1 raised to draw attention to the responsibilities  
2 of developers. We welcome the opportunity for input  
3 from government and the public, to consider  
4 suggestions and alternatives. However, in conforming  
5 with the requirements of governmental authorities and  
6 our citizens, we are subjected to the same lead  
7 time delays of all power utilities. What the price  
8 of development will be as a result of deferments  
9 is a matter of conjecture.

10 Would that we had added our third  
11 unit at Andrews Generating Station on the Montreal  
12 River nine years ago, at that time it would have cost  
13 us ninety dollars per kilowatt installed. We put  
14 it in service this year two hundred and seventy  
15 dollars per kilowatt installed.

16 Now, I believe, unless you wish it  
17 I shall forego a history here of Great Lakes Power.  
18 Is there anything there that you wish me to dwell  
19 upon?

20 THE CHAIRMAN: No, I don't think so.

21 MR. HOGG: I might mention something  
22 locally here.

23 Locally, in March of 1919, Great  
24 Lakes Power, having fulfilled its obligations to  
25 complete its portion of the Compensating Dam in the







2.5 1 St. Mary's River (eight gates), agreeing to maintain  
2 and operate the dam and to enlarge the power canal to  
3 provide the required discharge capacity, was granted  
4 20,000 c.f.s. in perpetuity. Currently we have the  
5 capability of using an average of 18,000 c.f.s. With  
6 energy requirements outpacing supply, and long term  
7 benefits of hydraulic power more attractive due to  
8 accelerating energy costs, the Company initiated a  
9 review of former studies. One of these reviews  
10 involved the Company seeking confirmation that up to  
11 40,000 c.f.s. of water would be available to Canada  
12 for any future generation using water of the St.  
13 Mary's River. We were informed that 35,000 c.f.s.  
14 was available but there was no documentation of the  
15 right to the 5,000 c.f.s. average flow at Sault Ste.  
16 Marie from the Ogoki and Longlac diversions.  
17 Application for the right to the 5,000 c.f.s has been  
18 submitted to the Ministry of Natural Resources.

19 Our first tie line with Ontario Hydro  
20 was placed in operation in August 1960. Initially we  
21 sold energy to Ontario Hydro; however, beginning in  
22 the mid 1960's, in order to meet our demand, power has  
23 been purchased from Ontario Hydro in varying amounts,  
24 depending on demands and the availability of water in  
25 our storage systems.





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To show the magnitude of our load at this time and what we predict for this December.

Our 1975 budget estimated a peak demand during December of 325 megawatts of which 125 megawatts would be purchased from Ontario Hydro. The estimated energy requirement related to this demand was 184 million kilowatt-hours. Approximately fifty per cent of this energy was budgeted as purchased power.

In order that our rates remain comparable with Ontario Hydro, we would be remiss in our responsibility if we did not seek out all possible sources of energy to minimize purchases.

Although we have a long term load growth of six and a half per cent, it is by no means uniform. We know from past experience that utilities generally have underestimated the nation's appetite for electrical energy. Large utilities that have a predominance of domestic customers, we suggest, do not have the many imponderables that plague our predictions. Four of our 8,150 customers consume 91% of our energy. Excluding the City of Sault Ste. Marie, three large industries are responsible for sixty-seven per cent of our energy -- all are subject to the whims of a fluctuating economy.







2.7 1 One that normally uses fifteen per cent of our  
2 capacity has been affected by the withdrawal of  
3 services of its employees since early July of this  
4 year.

5 Another problem area in forecasting is  
6 the vagaries of weather. We are currently  
7 experiencing one of the driest years in our period  
8 of record. The average monthly inflow to storage has  
9 been twenty-eight per cent of normal -- August was  
10 as low as seven and half per cent of normal.  
11 November is remaining dry and, with freeze-up in the  
12 offing, we foresee a very low and discouraging  
13 generation from our system. Even with one of  
14 our major customers not operating, we are bringing in  
15 fifty per cent more power than we normally would be  
16 at this time and are projecting a like amount for  
17 December, and on into the New Year.

18 In other words, in four days of this  
19 month, seventy-eight per cent of our energy is  
20 coming in from Ontario Hydro. That is how dependent  
21 we are upon that system, for supply of service to  
22 our many customers in Sault Ste. Marie.

23 We have been asked why we do not  
24 install conventional fossil fuel and/or nuclear  
25 generation, or even more expensive and sophisticated





2.8 1 types. You are aware, I know, that the cost of energy  
2 is prohibitive from units of a capacity that we  
3 require in our system. Unless a utility can support  
4 500 megawatt and up generating units, it is not  
5 competitive.

6 In order for the Great Lakes system to  
7 remain economically viable, we must concentrate  
8 only on hydraulic generation for the foreseeable  
9 future.

10 Seemingly there is a paradox at this  
11 time. There is an attempt to cut back expansion of  
12 electrical generation while specialists with a  
13 knowledge of current resources of fuels suggest an  
14 increasing trend in the use of electrical energy. The  
15 overriding reason for the deferment of generation is  
16 in order to reduce recommended rate increases. It  
17 appears to us that a deferment of generation is simply  
18 a deferment of payment -- payments that likely will be  
19 considerably higher in the future, coupled with the  
20 possibility, of course, of a lack of power supply.

21 Ontario Hydro was unique at its  
22 inception in 1906. Technologies about electrical  
23 production, generation, and transmission were in  
24 their infancy. From a small beginning it has become one  
25 of the most successful enterprises of its kind in





1 the world and it has been principally responsible  
2 for the economic and social benefits that we enjoy  
3 today. Hopefully Ontario Hydro's priority projects  
4 will receive immediate attention and favourable  
5 response so that the Corporation may continue to serve  
6 our needs in a manner consistent with compatible  
7 guidelines.

8 THE CHAIRMAN: Thank you very much,  
9 Mr. Hogg. I think it is very clear from that, on  
10 page 6 I had one question here. You talk about  
11 relying on the hydraulic generation in the future.  
12 Apart from the site --- Rapids, are there any other  
13 sites that you have?

14 MR. HOGG: There are, they are  
15 high cost. Not generally energy producing rather  
16 they would be peaking sites.

17 MR. ROSEHART: What sort of total  
18 capacity would be available there, in those other  
19 sites?

20 MR. HOGG: The other sites?

21 MR. ROSEHART: Yes.

22 MR. HOGG: Long River 25,000. If  
23 we were allowed to proceed into Hydro bailiwicks,  
24 40,000, that expensive.

25 DR. PORTER: Could you give us a rough







1 idea of the cost per kilowatt?

2 MR. HOGG: Installed?

3 DR. PORTER: Yes.

4 MR. HOGG: Well, as I said, we put  
5 a unit in the last two years at WaWa Falls, that did  
6 not involve a dam, or any clearing. It only required  
7 headwork, tunnel, truck and power house, and we were  
8 able to do that for 270 dollars kilowatt installed.

9 What we are looking at today, the  
10 numbers are coming up, the magic numbers, and they  
11 are in the area of 1 to 9,000 dollars per kilowatt  
12 installed.

13 Now, that is a low head plan of  
14 course, which is somewhat inefficient and as they  
15 say, and I have said for a number of years it would  
16 not be low cost energy. What it would be in six  
17 or seven years from now.

18 MR. COSTELLO: Presumably it involves  
19 no major pollution.

20 DR. STEVENSON: Any postponement  
21 of pollution?

22 MR. HOGG: None, not in the area of  
23 the rivers, there could be some cottages.

24 DR. STEVENSON: I am interested in  
25 your last page. Everybody is calling and asking to





11 1 curtail their rate of growth, and on the other  
2 hand energy experts are saying that we can't afford  
3 to continue to use gas and oil for things, and  
4 electricity might do better. They should save them  
5 for their chemical derivatives and so on. The  
6 paradox is clear, and the answer isn't nearly so  
7 clear.

8 I do wonder a bit about your statement  
9 that the deferment of generation is simply a  
10 deferment of payment.

11 MR. HOGG: That appears to be the  
12 only reason we know of today that they are looking  
13 at. The only consideration that has been given, to  
14 down-grade the Hydro rate increase, having recommended.  
15 Am I right?

16 DR. STEVENSON: Sometimes I think that  
17 only one side of the costs and benefits are looked  
18 at, when people talk about postponing planning. They  
19 think, well, if you are having 10 per cent inflation,  
20 it's going to cost more to build it next year. Of  
21 course, if you can still provide the capacity required,  
22 and not build a plant this year, you are saving the  
23 interest charges on the money you would need to  
24 borrow to pay for the plant, and these may, or may  
25 not be greater than the extra costs that would be







12 1 required to build it later.

2 MR. HOGG: I am not too sure. Bill,  
3 I believe you are aware of some of the Commission's  
4 plans. You know, you are probably aware now that  
5 they can place nuclear power plants that will be  
6 considerable. The cost of power will be considerably  
7 lower than from some of their older and more  
8 conventional plants, and this is what they are  
9 saying to me they want to put more efficient plants,  
10 low cost, into production, is that right?

11 DR. STEVENSON: Yes, I think that  
12 is right.

13 MR. HOGG: Or your transmission line  
14 can't get power out of it.

15 DR. STEVENSON: That is true, Mr.  
16 Harris mentioned this. If you are able to replace  
17 fossil station output with nuclear output at perhaps  
18 one-tenth of the cost per kilowatthour, and other  
19 things being equal, you do that as quickly as you  
20 can.

21 Obviously, if you have a nuclear  
22 power station that is doubled up because you haven't  
23 got a transmission line to move the power out, that  
24 is very expensive too, because your capital costs  
25 are carrying on for every day of the delay.





1 Well, the delays of public  
2 participation, and costs of public participation have  
3 been raised tonight. Perhaps before the evening  
4 is over, we will hear the other side of the  
5 equation, the importance of public participation.

6 MR. HOGG: You were mentioning before  
7 Bill, something about these long term predictions,  
8 and I believe Doctor, you mentioned it, the six and a  
9 half per cent of gross. When I said dollars there,  
10 they are not reliable in any one year, this is long  
11 term. This year, our energy supply sales are down  
12 eight per cent.

13 Now, it's not all Abitibi. Algoma  
14 Steel is down; Algoma Ore is down; the City is up,  
15 is up above 19 million. But you see this year we  
16 are not going to have a plus, we are going to have a  
17 minus.

18 DR. STEVENSON: One more question. I  
19 asked Mr. Harris if he was still promoting power in  
20 the City of Sault Ste. Marie, and he said he wasn't.  
21 I would like to ask you if Great Lakes is pursuing  
22 any active policy, in encouraging conservation?

23 MR. HOGG: We never have placed an  
24 ad, in my time here eighteen years, the sale of  
25 power. We have met the demand. Anything that appears





1 in the press, or in the news media is institutional  
2 advertising only. Moaning somebody else's activities.

3 DR. STEVENSON: Are your industrial  
4 customers at all able to achieve energy conservation  
5 or peak shaving techniques.

6 MR. HOGG: Not all. Algoma Steel can.  
7 They have two generators of their own. When they  
8 have excess fuel, gas, heat, they use it, and they  
9 use them very effectively.

10 DR. PORTER: Mr. Hogg, just a small  
11 point. You jumped the gun on Bill's question. Because,  
12 I think you thought he was going to ask, are you  
13 putting any ads in to build better electrically.  
14 Whereas, what he said in fact was, were you putting  
15 in ads to encourage conservation.

16 MR. HOGG: We are promoting the  
17 widest use of electricity.

18 DR. PORTER: Well, that's the same  
19 thing.

20 MR. HOGG: We have scads of literature  
21 at the office, picked up by people as they come  
22 through our building. We include them in our  
23 billings, or were including them in our billings  
24 when we were sending them out.

25 MR. ROSEHART: I would just like to







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say, Mr. Hogg, I had an opportunity to visit your  
station today, and congratulate on your operation.

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--- Upon resuming

THE CHAIRMAN: We have Mr. Leslie Lang  
who wants to make a submission I believe.

MR. LANG: Mr. Chairman, and members  
of the Commission I am very glad to have this oppor-  
tunity to express my views on this matter of such  
importance to our own welfare and that of generations  
to come. I think the Commission's work is bound to  
have a powerful influence, not only on the people of  
Ontario, but also on the rest of Canada.

I was interested to notice a couple of  
days ago that this is nuclear responsibility, I had  
never heard of nuclear responsibility before, an  
organization sponsoring it.

A very recent forecast that was in the  
Globe and Mail, on Monday as a matter of fact; by no  
less an authority than the Atomic Energy of Canada, is  
that there will be 150 nuclear reactors in Canada by  
the end of the century. As a matter of fact, in the  
next 16 years, 1990, \$212 billion will be spent on  
energy. Obviously that is not all going to be in  
Ontario. Ontario now has a major share of almost  
everything in Canada, so we can expect the major share  
of those reactors, and that expenditure, and whatever  
unhappiness they may bring.







3.2 1 It seems to me that if Hydro and the  
2 rest of the energy establishment in this province  
3 have their way, electrical generated capacity in  
4 Ontario obviously will be very much greater than it is  
5 now, and will be largely dependent upon nuclear  
6 reactors, supplemented by fossil power.

7 I for one would like to know, as a  
8 citizen, and as a person, and as a consumer, what the  
9 total and social economic cost is going to be with  
10 that development, and I hope the Commission will be  
11 able to tell me.

12 It seems to me now that some of the  
13 costs that already can be envisioned include, or may  
14 include not only greatly increased rates, which are  
15 forecast to double before long, but also large amounts  
16 of land for generating installation and power trans-  
17 mission corridors. The social dislocation that  
18 accompanies the construction of huge facilities, in  
19 rural areas. The destruction of natural communities;  
20 the plants and animals. The possibility of altering  
21 our climate.

22 The exposure of miners, Hydro employees  
23 and people living near these generators, to low level  
24 radiation. The unresolved, and perhaps unresolvable  
25 problem of transporting, storing, and disposing of  
very large quantities of highly toxic, radio-active





3.3 1 waste materials. The catastrophic loss of life  
2 resulting from the massive release of nuclear materials,  
3 by accident, by incompetence, by sabotage, or natural  
4 disaster. Dependence on nuclear industry for our life  
5 and happiness.

6 And finally consequences that we cannot  
7 now foresee, and there are always some of those.

8 The planned expansion of electric  
9 generating capacity has been based supposedly on the  
10 recent history of growth in power demands. However,  
11 it must be obvious to everybody, certainly in Sault  
12 Ste. Marie that the growth and demand has been at least  
13 partly created by the advertising campaign by Hydro  
14 and other utility corporations, in alliance with other  
15 branches in the industry, and have by rate structure  
16 in which unit costs decline with consumption.

17 Expansion of the system has been pro-  
18 moted by those who will benefit from it, or believe  
19 they will. For those who stand to benefit from  
20 continued growth in our population, and level of  
21 economic activity.

22 I hope the Commission will listen to  
23 those. For all we know, the majority of the people  
24 in Ontario, who will lose from further growth, and  
25 from the expansion that Hydro wishes to entertain.

In this connection, I would like to





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1 quote from a recent article in Science in July 25th,  
2 by Dr. Dennis Sorensen of Copenhagen. In examining  
3 the energy problems of industrialized countries, Dr.  
4 Sorensen said:

5 "There is evidence that the  
6 improvement of living standards  
7 constitutes a diminishing fraction of  
8 each increased gross national product,  
9 per capita. The rest is spent on  
10 structural changes required by the  
11 growth itself, and its side effects  
12 and on managing its waste."

13 Evidentially growth is not necessarily  
14 beneficial when it is viewed in terms of what it  
15 brings to people in happiness and the good things of  
16 life, and it should be the people who decide whether  
17 they are willing to pay the cost; people who have been  
18 fully and impartially informed of what those costs will  
19 be.

20 My own view, and I may be wrong. I  
21 have been wrong before. Is that the production of  
22 the historical record of power use in the future would  
23 be unjustified and unwise. We do not know whether  
24 our growth will continue. The world-wide economic  
25 recession, the depletion of natural resources, the  
population crisis and the shift in social attitude







3.5 1 all suggest that it will not.

2 We have certainly begun to determine  
3 how we can use the electricity we already produce more  
4 effectively, by conservation and a realistic rate  
5 structure. Nevertheless, the unpleasant and unavoi-  
6 dable fact is that we are running out of oil and  
7 natural gas, the two substances we rely on mostly, to  
8 heat our homes; and will be forced to turn to other  
9 sources of energy if we are to survive in this clime.

10 The question is, what other sources of  
11 energy. And that question I think has been put in  
12 true perspective by Dr. Sorensen again. He frames it  
13 this way:

14 "Which system would be most  
15 compatible for the formation of a  
16 society in which the largest possible  
17 faction would be G and P placed at the  
18 direct disposal of the population,  
19 instead of this being absorbed by the  
20 structure of the system itself."

21 The choice to be made, it would seem,  
22 is between nuclear power from large reactors, and  
23 power generation using the sun and the wind.

24 I wouldn't be surprised if the  
25 Commission were told, in fact I expect it will be, if  
it hasn't already been by those with vested interest





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1 in nuclear expansion; that wind and solar systems  
2 will not be economically or technologically feasible  
3 for many years to come, but I do hope that such views  
4 will be examined carefully and critically.

5 Dr. Sorensen's analysis demonstrates  
6 that large scale solar wind generators are indeed a  
7 viable alternative to reactors in Denmark, for the  
8 generation of electricity. Presumably they could be  
9 also in Ontario.

10 The large scale generation of  
11 electricity from the sun and the wind in installation  
12 comparable to the capacity to present reactors at  
13 fossil fuel plants, is only one of the possible ways  
14 that this energy source could be used.

15 A much more exciting application, and  
16 it seems to me that it is of enormous importance to  
17 the future of Ontario, is the small scale use of solar  
18 and wind energy to supply the power needs of individual  
19 buildings, including private homes. This kind of  
20 technology is developing rapidly, and available in  
21 existing and in new structures. There widespread use  
22 would appreciably reduce the demand for power on the  
23 Ontario electrical system, and they therefore warrant  
24 strong support. Such support to take the forms of  
25 sales and property tax concessions; low cost loans for  
equipment; publicly financed research to include the





3.7 1 technology of the climate of Ontario; and the  
2 subsidization of industries manufacturing such devices  
3 as solar furnaces and wind generators.

4 There is no doubt that the conversion  
5 to these alternative energy sources is going to be  
6 very expensive, but money will have to be spent which-  
7 ever way we go, the problem is how to spend it. I for  
8 one would rather have it spent on measures that  
9 decentralize the energy system, and increase the  
10 independence and self sufficiency of individual  
11 citizens. Thank you.

12 THE CHAIRMAN: Thank you Mr. Lang.  
13 You have covered your points very well. You can be  
14 assured we are going to look at solar energy, and  
15 energy from the wind. Of course you know the sun  
16 doesn't shine all the time, and the wind doesn't blow  
17 all the time. There is some problems involved there.

18 DR. STEVENSON: Would you be kind enough  
19 to tell me your profession?

20 MR. LANG: I am an entomologist.

21 MME. PLOURDE-GAGNON: What is the  
22 name of your Association?

23 MR. LANG: I am an individual, I am  
24 not representing anybody except myself.

25 THE CHAIRMAN: I have no comment. I  
think you have given an extremely excellent brief and







3.8 1 and we thank you very much.

2 We now come to Harriet Herschey, the  
3 Consumer Association, Algoma Branch.

4 MRS. HERSCHEY: First of all, I would  
5 like to say most of these questions have been raised  
6 in the opening speech by Mr. Costello. I am the  
7 President of the Algoma Branch of the Consumer  
8 Association of Canada.

9 It is our feeling that the interests  
10 of local citizens can best be protected by obtaining  
11 information which can be used to come to intelligent  
12 decisions.

13 Consequently this brief is in effect  
14 a series of questions to which we would like answers.

15 1. Impact of the North Shore Nuclear  
16 Plant on the existing community?

17 How much formal research has gone into  
18 the impact of the large influx of non-local skilled  
19 and unskilled workers and their families, on the  
20 communities surrounding the plant while under  
21 construction? Is it not obvious, the sudden increase  
22 in population will put an unbearable strain on the  
23 schools; fire protection; police; hospitals; sewage  
24 system; water system and so on.

25 Will the local taxes in such a sparsely  
populated area not rise to astronomical heights?





3.9

1 What will happen when the construction  
2 crews and the professional people leave, and the newly  
3 built schools, hospital beds and so on are left empty?

4 Is it not obvious from the situation in  
5 the Douglas Point area as reported by the Sault Star,  
6 that no like industry settles near these plants to  
7 alleviate these problems.

8 2. Environmental protection. Because  
9 of discoveries in the field by reporters, and Dr.  
10 Morton Shulman among others, we would like the  
11 answers to the following questions.

12 What assurance do we have that this  
13 plant will not emit the noxious smells that spoil the  
14 environment of the Provincial Park along Douglas Point?

15 What assurance do we have nuclear waste  
16 will be disposed of without danger to citizens today  
17 or in the future?

18 Will this plant, unlike the Pickering  
19 Plant be guarded properly at all times? What will be  
20 the effect of the huge quantities of waste on Lake  
21 Huron?

22 Have any new safeguards been developed,  
23 making the new plants safer than the ones already in  
24 operation?

25 3. Why Us? Would you describe in  
detail the transmission lines from the nuclear plant.





3.10 1 What is the width of corridor required for this  
2 transmission line?

3 What are the total number of acres to  
4 be used in Northern Ontario?

5 What percent of the power generated--  
6 will be used in the Algoma District, Sudbury, North  
7 Bay and the Northern Centres? Of the total exported  
8 to Southern Ontario, what percentage will be further  
9 exported out of the province?

10 What amount of power now produced in  
11 Ontario, is exported out of the province?

12 What is the projection for power needs  
13 in Northern Ontario in the next 25 years?

14 Unless well over half the power  
15 generated is consumed locally, why isn't the plant  
16 being built near the final point of usage, as the  
17 percentage of power lost in every mile of transmission  
18 is great?

19 In conclusion, I wish to state that on  
20 behalf of the Algoma Branch of the Consumer's  
21 Association of Canada, I wish to thank the Commission  
22 for this opportunity to appear before it and present  
23 these questions.

24 I look forward to the answers to these  
25 questions that I feel concern all local citizens.

THE CHAIRMAN: Thank you very much,







3.11 1 you have done very well. A lot of these points, as  
2 you know, came up on the Bruce Generating Station.  
3 The impact of any large construction project can be  
4 serious on a small community, can and has been, I  
5 should say.

6 We will be looking, we can't give you  
7 the answers to the questions now, but certainly these  
8 questions will be looked into, and we hope to provide  
9 all the answers.

10 DR. STEVENSON: It is interesting Bob.  
11 I notice something that Hydro made public this summer,  
12 to the effect that there has been a cross-over in just  
13 the last year, and Northern Ontario is now importing  
14 power from the South and in other years it was going  
15 the other way. I guess the old adage about subsidi-  
16 zation in Ontario will have to be rectified.

17 The point you make is the power going to  
18 be used in Northern Ontario is clearly one of the areas  
19 we will want to look at to satisfy ourselves. Thank  
20 you very much.

21 MME. PLOURDE-GAGNON: As you know, I  
22 represent the consumer on this Commission. This may  
23 be average of every consumer, and I guess the average  
24 consumer are also concerned as the ratepayers, and  
25 they are concerned by it. And it is needed by them  
not only concern to the long-range planning, even its





3.12

1 important they are more concerned than that, because  
2 of the average consumer use every five minutes the  
3 electricity at home, and because the conservation and  
4 educational aspects in our terms of reference concern  
5 directly your people in your Association; and from  
6 you, from them, from the Association I need a little  
7 more and more.

8 I met with the other representatives of  
9 the Consumer Association in London and Windsor, but  
10 its, you know, every time I find its fantastic because  
11 always you bring always something new, and I would  
12 like to know if, what is for you now, and your people,  
13 what it means the valued quality of life for the  
14 average consumer.

15 MRS. HERSCHEY: That's a pretty big  
16 question. I don't think I can answer that right now.  
17 I would have to think about that.

18 DR. STEVENSON: We got into it last  
19 night with the Manitoulin Island young people, and  
20 they were opposed to the power station on the Island.  
21 I asked them whether they would still oppose it if it  
22 were shown, and I didn't say it would be, that without  
23 power there wouldn't be industry and jobs for them.  
24 They would therefore be forced to leave the North,  
25 which they clearly love.

I think perhaps some of them hadn't





3.13 1 thought of it this way. I hope they can think of some  
2 trade-offs in society, and some personal trade-offs  
3 they might have to make. Some concessions they might  
4 have to make to the ideal that they obviously thought  
5 of as Manitoulin Island.

6 MME. PLOURDE-GAGNON: Maybe somebody  
7 may have the answer. I would like to know what it  
8 means "better quality of life", or quality of life,  
9 better or not, what it means at home, as ordinary  
10 consumer, if somebody can later on. Thank you.

11 THE CHAIRMAN: We now have Mr. Harry  
12 Graham.

13 MR. GRAHAM: Mr. Chairman, members of  
14 the Commission and particularly Madame Gagnon. This  
15 matter of quality of life is very much a part of our  
16 presentation.

17 Unfortunately you don't have all the  
18 background of what the Sault Rapids means in Sault  
19 Ste. Marie; but for some of us who have fished there,  
20 who have gone there to enjoy this scenic wonder. In  
21 a down-town situation we have as Ernest Hemingway has  
22 said the most outstanding rainbow trout fishing in the  
23 world, and Gregory Clark backs him up.

24 It is also very remarkable and we feel  
25 having this in a down-town location adds dimension to  
our quality of life here that is quite remarkable.







3.14

1 Now, I am going to read this. Somebody  
2 just handed me a book entitled The Rapids which was a  
3 novel written by a local gentleman and which eventually  
4 became a Hollywood movie. This is all about our  
5 Rapids here, and is very much a part of our culture.

6 Now a year or so ago Great Lakes  
7 announced a proposal to build a new power plant in  
8 the Rapids, and as with the case of Ontario Hydro,  
9 there was very little communication with the public.  
10 From the outset we formed our Society to try to save  
11 what remained of this Rapids and tried to co-operate  
12 and perhaps we could come up with an alternative to  
13 this proposal.

14 We were told we would have to wait until  
15 October, and we waited, and we have had no offer from  
16 the Power Company, no alternative from the Power  
17 Company, and because of that we have taken the position  
18 as is expressed in this letter.

19 "Dear Sirs:

20 "We would respectfully solicit  
21 your support for the objectives of our  
22 Society (please see membersh ip card  
23 attached), and trust that with regard  
24 to hydraulic power generation in the  
25 St. Mary's River you will honour:

(1) The pledge made by all four local





15

1

candidates in the September, 1975

2

Provincial Election here in Sault Ste.

3

Marie, i.e.

4

'The province should refuse to

5

allow any expansion of Great

6

Lakes Power that would endanger

7

the existence of the St. Mary's

8

River rapids.'

9

All four candidates agreed to that

10

position;

11

(2) The petitioners of the Sault Rapids

12

Society (more than 4,000 people who

13

signed in a record six week period in

14

May and June of 1975 to protest the

15

Great Lakes proposed power plant

16

location in the Sault Rapids) ..."

17

Now, I want it clearly understood we

18

are not against Great Lakes Power using the water in

19

the St. Mary's River. We are simply against the

20

Rapids location and we have made this very clear, and

21

we have published alternative locations, and these

22

alternative locations have not been commented on by

23

the Power company, so we still await their alternative.

Take 4

24

"(3) Some 14,000 members of the Ontario

25

Federation of Anglers and Hunters who

supported our resolution condemning the





4.16

1 Great Lakes Power plant location in  
2 the Sault Rapids by an unanimous vote  
3 on August 19, 1975;

4 (4) The position paper of the City  
5 of Sault Ste. Marie with regard to the  
6 Sault Rapids and the proposal of the  
7 Great Lakes Power Corporation. See  
8 copy of City Engineer, Alan Jackson's  
9 letter, dated November 25, 1974,  
10 attached;

11 (5) The Sault Ste. Marie Region  
12 Conservation Authority 1975 Waterfront  
13 Development Study preliminary choice  
14 of the St. Mary's and Whitefish Island  
15 as one of four major open space areas  
16 worthy of more detailed survey analysis.  
17 The proposed power plant of Great Lakes  
18 would slice off one third of the land  
19 area of Whitefish Island, the nearest  
20 land to our famous Sault Rapids."

21 Now, I believe there are two kinds of  
22 land. There is land that should be developed, and  
23 there is land that should be kept for the people. We  
24 are talking about land that should be kept for the  
25 people. Kept for open space; open to the sky, without  
any development.







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"At the founding meeting of our Society, April 30, 1975, the membership recommended that before any decision could be made on the Great Lakes Power Corporation hydraulic power plant proposal, two major studies of the river must be undertaken:

(1) An Environmental Impact Assessment (as now required by Bill 14 for all government projects in Ontario);

(2) A complete hydraulic study of the effect of the project on the flows of the St. Mary's River, especially its effect on the visual resource of our famous Sault Rapids. If Ontario Hydro was required to build a river model together with New York's Power Authority before they could dam up the Long Sault Rapids then we believe a similar model must be built here for any similar proposal in the St. Mary's River."

THE CHAIRMAN: Thank you very much Mr. Graham.

MR. HOGG: At this time we are not doing what Harry has mentioned. We are not proceeding





4.18

1 with the environmental study until we are certain that  
2 we want to proceed with it, magic numbers are coming  
3 through now, through the big computers. There is  
4 three main areas, two alternatives.

5 DR. ROSEHEART: Sir, what is involved  
6 in forming a society like you have formed, any sort  
7 of legal thing you have to do?

8 MR. GRAHAM: This is a grass root  
9 society, it started in the barber shop. It is  
10 fascinating. I went down to the barber shop. We had  
11 a full page ad in the Sault Star, a report in the  
12 Sault Star by a young reporter who explained this  
13 whole situation, that the Power company wasn't giving  
14 us all the story, and that the Conservation Authority  
15 was very upset, and the Minister of Natural Resources,  
16 and it ended with a quote from the Deputy Minister of  
17 Natural Resources who said in effect there didn't seem  
18 to be any public concern in Sault Ste. Marie; and  
19 therefore he would have no alternative but to approve  
20 their proposal, and this is where we took off.

21 I went down to the barber shop, and  
22 golly here was a group of, a petition already started.  
23 And so we got it going we made up petition books like  
24 this, and there is a backlog of three or four hundred  
25 fishermen that worked that Rapids every day. They go  
out there before eight o'clock, before they go to the





4.19 1 steel plant. I don't think there is another town that  
2 I know of where you can do this. There are 28 different  
3 kinds of fish in that route, not just trout or salmon.  
4 So they were the advance corps, and they went out with  
5 this through the steel plant, across the town. We  
6 started out, we were just going to get a thousand  
7 signatures, the next thing we knew we were up to four  
8 thousand, and that's only the start.

9 If this plant stays on and is laid on  
10 again we will go into the city ward by ward, and four  
11 thousand we will leave far behind. It's just got  
12 rolling like wildfire it was so easy to get signatures,  
13 it wasn't even funny.

14 THE CHAIRMAN: Thank you very much  
15 Harry. That is the only submissions. Are there any  
16 questions? If not, this meeting is adjourned.

17 ---Meeting adjourned.  
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# THE ROYAL COMMISSION

## ON

# ELECTRIC POWER PLANNING

*Preliminary Meetings of the Royal  
Commission on Electric Power Planning*

**DATE:** Nov. 6, 1975 **TIME:**

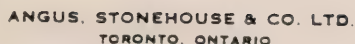
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ROYAL COMMISSION

ON

# ELECTRIC POWER PLANNING

Meeting held at Timmins,  
Ontario, on November 6th,  
1975.

— — — — —

CHAIRMAN: DR. WILLIAM M. STEVENSON

CHAIRLADY: MME. SOLANGE PLOURDE-GAGNON

VOLUME 4







1 THE CHAIRMAN: Mr. R. J. Byrnes.

2 MR. BYRNES: Thank you, Mr. Chairman.

3 Ladies and gentlemen, the submission on behalf of  
4 the Timmins Board of Education actually deals with  
5 our five year Forecast Programme. This could change  
6 from time to time and this is a very simple mini-brief,  
7 it has been delivered to the Commission. We are  
8 dealing with the replacement requirements for Timmins  
9 High and Vocational Schooled, considering that the  
10 present building will probably be sold or put out  
11 of use.

12 We are dealing with the Queen  
13 Elizabeth Public School, a renovation or replacement  
14 programme.

15 Renovations and additions to  
16 Schumacher Public School, and the additional  
17 services there required.

18 We also have a programme, a proposed  
19 ten-room elementary school for the French Immersion  
20 Programme, and this will be a new establishment  
21 entirely.

22 Two new portable classrooms at  
23 Whitney Public School, also requiring additional  
24 power.

25 Replacement of the school for retarded





1.2. 1 children, under consideration that the present  
2 building be put to other use.

3 In all of our areas, we are looking  
4 for additional storage room and library resource  
5 centres, all the facilities that go with an  
6 educational system and the improved technology, and  
7 different requirements for Hydro use.

8 I regret, Mr. Chairman, that we didn't  
9 have your terms of reference prior to preparation  
10 of the brief. Perhaps we can elaborate more.

11 THE CHAIRMAN: Thank you very much,  
12 Mr. Byrnes. It has been our practice to ask for  
13 questions, so just stand by.

14 Does the Commissioner have any  
15 comments. Thank you very much, Mr. Byrnes.

16 DR. PORTER: Mr. Byrnes, from time  
17 to time during the past two weeks the question has  
18 been raised of education in the schools, with  
19 specific reference to the need for energy conservation.

20 In particular we have heard from  
21 high school students in this regard. In fact, the  
22 very first night that we met in London, a high school  
23 student raised this question and said why wasn't there  
24 material, educational material to facilitate this  
25 education programme.





1.3 1 I just wonder, I know that it is  
2 rather outside your present scope, being the  
3 Supervisor of Property, but I just wondered if you  
4 knew of anything going on in the Timmins schools in  
5 this respect?

6 MR. BYRNES: Mr. Chairman, there are  
7 programmes in the technical end of the school, and  
8 in class areas of the school, in which I know their  
9 programmes call for extensive reverence to  
10 conservation of energy and electrical use, but the  
11 details of it I don't know.

12 THE CHAIRMAN: Thank you very much.  
13 Our second submission tonight is from the Town of  
14 Kapuskasing, and Public Utilities Commission, Mr.  
15 Bordeleau.

16 MR. BORDELEAU: This is a joint  
17 presentation by the Town of Kapuskasing and the  
18 Kapuskasing Public Utilities Commission.

19 1. We are of the opinion that  
20 one of the main thrusts of your Commission on the  
21 future of electric power planning should be at the  
22 efficient use of energy. Indiscriminate use of  
23 energy, as has been everyone's practice in the past,  
24 leads to higher than necessary capital to provide  
25 the necessary generation and transmission facilities







1 and the above normal operational costs.

2 We feel that future generation and  
3 transmission requirements could be reduced by some of  
4 the following practical means:

5 (a) Require all hot water heating to be  
6 installed on a controlled basis. By this means this  
7 type of flexible load would be cut off at the daily  
8 peak periods, as is the present practice in some cases.  
9 By using this method universally there would be a  
10 substantial reduction in peak loads and therefore  
11 reduced generation transmission requirements.

12 (b) Require all electric heating and air  
13 conditioning installations to be connected on a  
14 controlled basis so that this type of load would be  
15 cut off at the daily peak periods. The Kapuskasing  
16 P.U.C. has used this policy with electric heating  
17 commercial installations, together with a special  
18 customer discount, and there have been no problems  
19 with heat recovery during the normal peak cut-off  
20 period of 75 minutes and there has been a substantial  
21 reduction in the demand load.

22 Suggestions (a) and (b) concern those  
23 types of electrical use that lend themselves to  
24 system wide control, probably on a community basis.

25 (c) Consider the option of allowing





1.5

1 customers to have their energy requirements, other  
2 than lighting, in addition to (a) and (b) above, cut  
3 off at peak periods for which they would receive a  
4 special discount on their energy billings. By  
5 promoting this type of optional feature, those people  
6 who wish to reduce their power costs (in view of the  
7 large ever-increasing power costs) would gain and  
8 so would the power suppliers with reduced peak loads.  
9 While this type of arrangement may require some re-  
10 arrangement of living to customers for an hour or so  
11 per day, those persons that are prepared to do so  
12 would be compensated for the inconvenience.

13 (d) Consider adopting a rate structure  
14 whereby above the average use the rates sharply  
15 climb instead of the present theory of lesser unit cost  
16 for increased consumption. If there was a penalty  
17 proviso by means of the higher rates, people would  
18 become more conscious of conservation of energy.  
19 This proposal suggests that the present rate structure  
20 policy remain in effect up to the average use to  
21 recover first costs et cetera and beyond that point  
22 in effect surtax the consumption, which is probably of  
23 a luxury nature. A cost approach rather than an  
24 educational approach would be the most effective means  
25 of bringing about conservation.





1.6

1                                   2. We wonder if the Ontario Hydro  
2 policy on reserve capacity is more than is actually  
3 required from a practical standpoint compared to the  
4 costs that are involved to develop the additional  
5 reserve capacity. We suggest that with the  
6 enormous capital costs that are being projected for  
7 the future, that perhaps the public should be prepared  
8 to take some calculated risks with reduced reserve  
9 capacity and thereby even some brownouts if  
10 necessary. System conditions demanded such an  
11 approach in the late '40's until additional capacity  
12 was provided and actually no one seemed to be adversely  
13 affected. Perhaps, economic should now dictate a  
14 trend away from all possible safeguards because there  
15 just is not enough funding available nor the ability  
16 to repay the funding.

17                               3. We feel that when large capital  
18 requirements are necessary for Ontario Hydro growth  
19 with the attendant large increases in power costs,  
20 as is the case for 1976, that the funding  
21 should be levelled out over a period of years by the  
22 provision of special provincial financing over and  
23 above that which can be supported by the power rates at  
24 the time. We are suggesting that the power rates be  
25 limited to an increase in any one year of perhaps the







1.7

1 cost of living increase plus 2% (similar to the  
2 recent federal price and income guidelines) with the  
3 difference held until such time as the ability to pay  
4 is demonstrated. We are not suggesting that there  
5 should be any subsidy arrangement; only a deferral  
6 of payment in line with current ability to pay. We  
7 do not feel that an essential commodity controlled  
8 by a government should be an instrument to propel  
9 inflation.

10 4. We suggest that the Ontario  
11 Energy Board be requested, when considering rate  
12 applications by the natural gas companies or Ontario  
13 Hydro, to adopt a policy of as close as possible to  
14 equalized rates for the various energy sources for  
15 residential use. If there is a large differential in  
16 the rates between say natural gas and electricity,  
17 there is a swing towards the lower priced fuel. We  
18 are not suggesting fixed rates or any obstructing  
19 non-competitive feature, but are saying that the  
20 rates for the same thpe of use for various energy  
21 forms be very competitive and that any rate increases  
22 that are granted be on the basis of maintaining a  
23 competitive status in order to allow for maximum  
24 use of all energy forms.

25 5. We are somewhat concerned with the





1 delays that are brought about in the construction of  
2 generating plants and transmission lines and the extra  
3 costs that are made necessary by the actions of some  
4 environmental groups in the siting of these  
5 facilities. While certainly there is a useful purpose  
6 served by public scrutiny and input into large  
7 utility undertakings, we feel that the public input  
8 can best be provided by the people living in the area  
9 concerned and that not much is gained, other than  
10 delays and added costs, by the intervention of  
11 outside groups. We suggest that siting of  
12 facilities in the North should mainly be the concern  
13 of the people from the North.

14 MR. COSTELLO: Well, this is an  
15 excellent brief, very well prepared.

16 MR. BYRNES: Thank you.

17 You have some excellent suggestions  
18 and recommendations in here. Cutting off air  
19 conditioning is a new suggestion so far in our  
20 travels.

21 Restriction on the use of electrical  
22 power other than lighting I presume would involve  
23 a separate meter however, this is being done, and they  
24 are a lot more short of power than we are. I am just  
25 going through your points here.





1 Point two, it is true, and I am  
2 not supporting Hydro here, they used to operated at  
3 a much lower reserve capacity, when they were all  
4 hydraulic generation. You know, hydraulic generation  
5 just goes, and goes, and goes about 98 per cent of  
6 the time. That isn't so with steam generation,  
7 power stations they are 85 or 80 as I understand  
8 it.

9 The cost of living, there is a  
10 problem there. Hydro brings in in a year 1200  
11 tons of U.S. coal. There isn't too much control  
12 on the price of that in Canada.

13 The last point is an interesting  
14 one. We just came from Sudbury and the Sault, and  
15 I used to live at the Sault. Everybody in Sudbury  
16 was against it, nuclear, or any kind of generating  
17 station in the North Channel, their end of the  
18 North Channel. Put it at the other end, where I  
19 haven't got my cottage.

20 We went to the Sault last night,  
21 and we got a repeat performance; Blind River they  
22 would like to have it, but the cottages in Blind  
23 River aren't that enthusiastic. So there are  
24 problems here.

25 I think you have a good point. People







1.10

1 have to live near these generating stations, and  
2 should have their in-put, and will have their in-  
3 put.

4 DR. PORTER: Mr. Bordeleau, I too  
5 would like to congratulate you on the submission.  
6 It is very comprehensive and certainly introduces  
7 some rather unconventional points of view.

8 This idea of the rate structure,  
9 and this is really Bill's area, and he is our  
10 expert on rate structures and so on.

11 I just wonder if you have any ideas  
12 on how such a scheme as you suggest, which of course  
13 is very conservation oriented, could be implemented?

14 Presumably you would set a quota for  
15 each consumer; industrial, domestic, and so on; I  
16 mean, above that presumably there would be an  
17 escalation in the rate. I suspect one of the  
18 difficulties would be implementation. I wonder if  
19 you have any thoughts on that.

20 MR. BORDELEAU: Well again, if I might  
21 explain, the brief is not mine. The main point that  
22 some people in this area, especially in Kapuskasing,  
23 we have been brought up to allow ourselves to  
24 believe that the more power we use, the cheaper it  
25 will become. So actually we have been spoiled with





1 the fact that nobody takes care of turning down the  
2 TV set, or the light. So what we are suggesting is,  
3 actually I think the arrangement would be complicated,  
4 to make people more cost conscious of electricity,  
5 so that our own kids have an idea that electricity  
6 is not an ultimate source of energy that we might  
7 benefit for thousands of years.

8 You know, if people would be made to  
9 pay for the luxury involved in electricity, instead  
10 of the opposite, which is being done right now.  
11 Everybody is saying; no problem, don't turn off the  
12 lights, it's going to cost you as much if you turn  
13 it off, so it's an education we could implement in  
14 schools, and I think especially for this generation.

15 We are very, very spoiled as far as  
16 electrical consumption is concerned. So the scheme  
17 would be probably practical, but I think the idea  
18 would be quite practical.

19 DR. PORTER: You mentioned later in  
20 the same paragraph that a cost approach rather than  
21 an educational approach would be the most effective.  
22 I am sure you meant they would be complimentary of  
23 course.

24 MR. BORDELEAU: Exactly. I think if  
25 you penalize people for using a luxury, I think if a





1 person has three television sets, and he can afford  
2 it, fine, he should maybe pay for the extra  
3 consumption, which actually does not operate now  
4 if I can understand it correctly. Again, I am  
5 not an engineer, far from it. Those are just ideas.

6 DR. PORTER: The final point I would  
7 like to make relates to the last paragraph,  
8 paragraph 5 of your submission. Where you suggest  
9 in the very last sentence that siting of facilities  
10 in the North should mainly be the concern of the  
11 people from the North.

12 There are problems of course like  
13 the environmental, which of course many of these  
14 public interest groups are concerned with, and you  
15 know, and many environmental people in effect can't  
16 be too easily located, and I think that is one of  
17 the reasons why these groups, which I think you  
18 will agree have done considerable service in the  
19 past in many areas. I think that is why they feel  
20 they ought to act as a watch dog, wherever there is  
21 a siting of some facility, that they say it is going  
22 to have an environmental impact. If it does, then  
23 that's a global impact.

24 MADAMME PLOURDE-GAGNON: (In French  
25 translated into English). Mr. Bordeleau, you know







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1 of course that the Commission must consider on a  
2 priority basis the situation in the North; and since  
3 we went to Sudbury and Sault Ste. Marie the people  
4 appear to be very worried about having a station  
5 built in the North.

6 MR. BORDELEAU: I represent the  
7 Council.

8 MADAMME PLOURDE-GAGNON: Of course,  
9 I am not very familiar with the geographic situation.  
10 You are here tonight and you are concerned just  
11 as much as the people in Sudbury and Sault Ste.  
12 Marie about this project. In the last sentence  
13 of your report and the siting in the North, the  
14 concern of the people in the North.

15 About the people in Kapuskasing, does  
16 this programme worry them as much, the siting, or  
17 the need to build.

18 MR. BORDELEAU: No, Mrs. Gagnon.  
19 I think the impression that people in the North  
20 have had just about enough of all these groups that  
21 have never visited the North like the club in  
22 Toronto who pass themselves as fellow-conservationists,  
23 or conservationists, in the development that  
24 apparently should help the North. And some of them  
25 have said they prefer to keep from coming more





1 cottages out in the far North. We wouldn't want  
2 to have people from Toronto, or Windsor to tell  
3 us not to do that, because it is going to destroy  
4 the nature. We tell ourselves and we hope that  
5 you come to the North and you see if we can  
6 suggest you certain sites where you could put up  
7 these stations. We will be very happy to give you  
8 the input and not just for you to consider the  
9 input, or the information that you might get from  
10 Toronto.

11 MADAMME PLOURDE-GAGNON: Thank you  
12 very much. I have had the impression that people  
13 from Kapuskasing were very interested in this  
14 project. What would the people in Kapuskasing say  
15 if the building went up in Kapuskasing, or in the  
16 North, and if it would create considerable growth  
17 for the region, the people in the North would be  
18 very interested in this growth?

19 MR. BORDELEAU: And if you were to  
20 build this station on one of our rivers, we might  
21 risk polluting this river. They are already  
22 polluting all the other things that are in their  
23 station.

24 DR. STEVENSON: Your brief is just so  
25 provocative. Let me try to -- I am fascinated by





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1 Kapuskasing P.U.C. efforts to control the electric  
2 heating. Obviously if this were to be done  
3 successfully across the Province of Ontario, you are  
4 quite right. You could reduce very considerably  
5 the peak requirements of Hydro on the coldest  
6 winter day, which is of course the day that the  
7 system planners take into account, when they are  
8 planning the amount of generation that is needed.

9 Sometimes, when you cut a lot of  
10 load that are on at the same time, there is what  
11 the engineers call a fly-back effect. That is to  
12 say when you start to re-connect again when you are  
13 facing a surge, it is very difficult to manage.  
14 Are you familiar with this problem. If so, how  
15 does Kapuskasing get around it, do you have any  
16 idea?

17 MR. BORDELEAU: Well, we know we have  
18 that situation in Kapuskasing, but I have never  
19 heard of a problem of what you tried to explain right  
20 now. I know my hot water heater cuts off 75  
21 minutes every day, and there hasn't been any major  
22 problems. That is why we are so interested in  
23 forcing people in Toronto, into cutting their air  
24 conditioning insulation, because we don't particularly  
25 need this insulation up here.







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1 DR. STEVENSON: All right. So much  
2 for that question. The next page with reference to  
3 the possibility that the Ontario Government should  
4 step in to temporarily support Ontario Hydro, in  
5 times when Ontario Hydro would otherwise require  
6 rate increases, one or two per cent over the cost  
7 of living increases for that year.

8 This kind of argument was made to the  
9 Energy Board this summer, by people who were  
10 opposed to 25 or 30 per cent rate increases. But  
11 it does represent a problem to me, and we know the  
12 problem already guarantees Hydro Bond Issues, and  
13 indeed in New York they raised the money for Hydro.  
14 So when Hydro and the Province are seen as one  
15 credit, as one source of funds to retire that debt,  
16 it becomes difficult therefore to contemplate shifts  
17 of funds back and forth, from one to the other. They  
18 really are one money raising activity to borrowers  
19 who are considering lending money in Ontario.

20 If the Province were to be required,  
21 let's say, to support Ontario Hydro to the tune of  
22 three or four hundred million dollars next year,  
23 so that Ontario Hydro could survive on a much lower  
24 rate increase, the Province would have to raise three  
25 or four hundred million dollars, from us, in this





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1 time as our role as taxpayers, or by borrowing.  
2 Whether they borrow themselves, for their own  
3 purpose and then turn it in to Hydro, or whether  
4 they borrow directly from Hydro, to me, doesn't  
5 really make much difference to the essential problem  
6 we have for citizens in Ontario. It isn't easy,  
7 in other words, to implement your plan, I'm afraid.

8 I think there may be something in  
9 there that is capable, I am not positive.

10 MR. BORDELEAU: I think that everyone  
11 understands the problem of raising monies, but for  
12 the ordinary wage earner it is really harder to  
13 understand, you know. Accepting a government  
14 we have sort of freeze on wages a little bit,  
15 but make sure we don't freeze, we are going to  
16 increase the power cost by 25 per cent, you know.  
17 Unsophisticated people are questioning, not the  
18 legality of it, but the rationale I guess behind  
19 that. So you know, what we are saying, is maybe some-  
20 body should start looking, you know, at funding of  
21 Hydro in a way that people won't be affected by a  
22 huge increase every year.

23 You know personally, you live in  
24 Kapuskasing, it's not much different from Timmins,  
25 and you know, a small house, a small bungalow house





1 I have got, my rate per month on the flat rate  
2 basis of electric heat and electricity is going to  
3 be 90 dollars a month. Now, you know, it's fine if  
4 one can afford that amount, but it could be extremely  
5 difficult for a person earning a set salary, for a  
6 person to afford owning a house. When you hit  
7 25 per cent there is a rumour going around somewhere,  
8 I don't know where it started, the post office or  
9 somewhere. There is a rumour going around that in  
10 1977 we would be faced with another increase, and  
11 people are just wondering. So, you know, it's up  
12 to economists like you to figure out the system  
13 that would probably not cost as much probably.  
14 We are just saying that us unsophisticated people,  
15 we want you to assure us, of a system, that we are  
16 not faced with here.

17 DR. STEVENSON: The government of  
18 Ontario as you are well aware, in its wisdom, has  
19 taken the problem out of the hands of the economists  
20 and put it in the hands of the Legislature. Donald  
21 MacDonald and a few others are looking into the  
22 very question you posed; can people be reasonably  
23 expected to pay 25 per cent more for power, when  
24 wage and price freezes are imposed. This is now a  
25 political question, and it may be determined at that







19 1 level.

2 MR. BORDELEAU: Thank you.

3 DR. STEVENSON: Just one question that  
4 Bob Rosehart has.

5 MR. ROSEHART: Much has been made  
6 of the sort of 7 per cent increase in demand for  
7 electrical power in the last few years. How is the  
8 growth rate in Kapuskasing P.U.C. jurisdiction.

9 MR. BORDELEAU: Frankly I couldn't  
10 say. I have been working out of Kapuskasing for the  
11 last three or four months. I have just found out  
12 what P.U.C. means, but we are facing an annual  
13 growth of around eight to nine per cent.

14 MR. ROSEHART: In any new housing  
15 developments what is the type of heating that is  
16 being used?

17 MR. BORDELEAU: Well, we get a lot of  
18 TV love stories here. We do get some TV, but we  
19 still get the message heat electrically, so -- but  
20 I see more and more houses are being built and  
21 heated electrically.

22 MR. ROSEHART: With much publicity  
23 about increasing electrical rates, why do you think  
24 this is happening?

25 MR. BORDELEAU: Well because





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1 probably the contractor figures he just increased  
2 the price of the building. No problem with the  
3 contractor, the consumer hasn't got that much choice.  
4 Most houses are being built by contractors. It's  
5 still also because electricity is still a commodity  
6 you know.

7 MR. ROSEHART: Is natural gas  
8 available in Kapuskasing?

9 MR. BORDELEAU: Oh yes, no problem.  
10 There was also mentioned probably the strike  
11 situation around that area, all the wood lying  
12 on the river, instead of being left there could be  
13 used by people to heat their houses.

14 DR. STEVENSON: Next we have a  
15 submission by Mr. Thomas Bell of Timmins.

16 MR. BELL: Mr. Chairman, and members  
17 of the Commission I may have the wrong interpretation  
18 of this meeting. My submission is principally on the  
19 Hydro rates, and there are a few paragraphs dealing  
20 with matters that have been dealt with before. But  
21 before I go on, I would like to congratulate Mr.  
22 Bordeleau from Kapuskasing, he did a very nice job  
23 in presenting his brief I only wish I could have done  
24 as well. You have the brief before you. Do I read  
25 the whole thing, or just the points dealing with





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energy.

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DR. STEVENSON: If you wish to

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read it, you may proceed.

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2-1 1 MR. BELL: I realize this committee  
M/kr 2 can only make recommendations, whether Hydro or  
3 Government accepts, is another matter. Owing to the  
ov. 6th 4 fact that this matter affects everyone in the Province  
975 4 of Ontario, I feel my privilege to submit my protest,  
5 not criticism of Hydro's service, but if my objects  
6 are taken seriously, they are intended to be constructive.

7 This submission is accompanied with  
8 a folder of newspaper clippings, and are listed as part 1  
9 and part 2.

10 Part 1 speaks for itself. Ontario  
11 originally created Hydro as an appendage of Government,  
12 to give power to Ontario residents ( customers) at cost.  
13 All indications point at this appendage waging its  
14 master, and public hearings do not seem to have the  
15 punch to assure that our Government is master of his  
16 own house.

17 Part 2: it is very revealing that  
18 some of this increase in rates is going into exploration  
19 of Moose Pasture to secure a deposit of uranium for  
20 future use, when the private mine operators are trying  
21 to secure contracts for their product. Hydro can take  
22 the customers' money for this type of work, when private  
23 individuals have difficult times with the Ontario  
24 Securities Commission to raise risk capital for  
25 exploration. Yet Hydro will take customers' money and  
shove it down a rat hole.





1 As far as their credit standing in New  
2 York is concerned under present conditions in New York  
3 City and various other states who are in trouble, good  
4 Hydro credit should be able to get money much cheaper  
5 than is now indicated. In 1973 Hydro had a good bond  
6 issue of \$50 million in Ontario at 9 percent and over  
7 subscribed. A month later a similar issue was made in  
8 New York at 9½ percent. With a program of "Buy  
9 Ontario" and bank accounts at highest in history, why not  
10 give our residents the full privilege of owning their  
11 own country?

12 Another program of immense advertising  
13 "Live Better Electrically" at the same time one to  
14 "Conserve Energy". No doubt this increase of some amount  
15 will be set for January 1st 1976. In any event my  
16 heartfelt sympathy goes out to the poor devil who  
17 bought a fully electrified home. As for me, I can get  
18 by with candles.

19 With my full respect for the success  
20 of this Commission.

21 Incidentally, I am a pensioner, and  
22 I have been asked by some of my fellow pensioners to  
23 submit something, with this increase it's going to be  
24 very hard on them.

25 DR. STEVENSON: Yes, I think Mme  
Plourde-Gagnon would like to ask a few questions of you.





1 MR. BELL: You can talk English.

2-3 2 MME. PLOURDE-GAGNON: This is exactly  
3 the question. In your first paragraph you say that  
4 the Commission could make recommendations. You speak  
5 French?

6 MR. BELL: I guess I am too old for  
7 that. You can talk English like me.

8 MME. PLOURDE-GAGNON: The first  
9 paragraph you mentioned that is the Commission could  
10 make some recommendations that the Government or Hydro  
11 may not accept, and you are frank enough and honest  
12 enough to say that you are a little bit confused about  
13 the effect this Commission will have in things like that.  
14 I would like to say that it is not possible that these  
15 recommendations may be accepted. The fact that this  
16 Royal Commission is different from other commissions,  
17 because it relies on public participation. In two or  
18 three years the Government will receive these recommend-  
19 ations and will make their decision. If there is good  
20 public participation during those years, I think the  
21 Commission will have a stronger voice, because we act  
22 as middle men between the public and the Government.

23 The Government will know that the public  
24 has participated fully and our recommendations on your  
25 behalf will be that much stronger. I think the public  
participation is very, very important because of that.







1 MR. BELL: Thank you.

2-4 2 DR. STEVENSON: Do you have any  
3 observations, Mr. Bell, on that? Are you ready for  
4 the next question?

5 MR. COSTELLO: Mr. Bell, I think  
6 everybody is quite concerned with the fact that price  
7 increases of people on low income, of people on pensions  
8 who are on low incomes in most cases.

9 I don't really think that Hydro is  
10 using their customers' money if they go out on an  
11 exploration, I am not defending them doing exploration.  
12 I know that Abitibi was doing exploration, mining was not  
13 our business and we were not in charge of that exploration  
14 on an operating cost.

15 MR. BELL: That is very peculiar  
16 after this item in the Northern Miner: " Hydro Seeks  
17 Uranium with Shell and Amok."

18 MR. COSTELLO: I think they have to  
19 do it with money they borrow on the open market and  
20 not use customers' money.

21 MR. BELL: I disagree with that,  
22 Mr. Costello.

23 MR. COSTELLO: Thank you, Mr. Bell.

24 MR. BELL: I don't think there is  
25 anything else, thank you very much.

DR. STEVENSON: We have Mr. Pope





2-5  
1 down here from the Association of Municipalities of  
2 Ontario, and one way in which Ontario Hydro could gain  
3 additional capital, and Mr. Pope was the advisor to  
4 the Association of Municipalities of Ontario. It has  
5 not been considered as a proposition that Ontario Hydro  
6 should consider it for the moment. They are going to have  
7 to raise the funds to participate in this venture from  
8 the customer and from the usual recourse of borrowed  
9 capital.

10 This newspaper clipping, Mr. Bell, comes  
11 at a time when Hydro has been under some criticism from  
12 the Federal Government, for its lack of, you might call  
13 it imagination and commitment to seeking out long term  
14 supplies of uranium for nuclear power stations that it  
15 is building.

16 So I am sure that Hydro would defend  
17 the program on the grounds that it would appear to  
18 be what the Federal Authorities had been trying to  
19 urge it to do.

20 It will be necessary to hear from  
21 Hydro, when we come to the point of formal hearings, on  
22 their justification for engaging in what I guess now  
23 is a fairly speculative exploration venture, and I am  
24 sure that it will be a matter of interest to the Commission  
25 too.

The next submission then is from Mr.





1 Sloan, D. Brad Sloan.

2 MR. SLOAN: Mr. Chairman, fellow  
3 commissioners, ladies and gentlemen. Thank you for  
4 the opportunity of speaking to you this evening.

5 My submission is more lengthy than  
6 some of the previous submissions, and I will therefore  
7 really attempt to gloss over some of the points and  
8 speed it up a bit.

9 It appears to me there is a  
10 combination of ways that Hydro can attack the bottleneck  
11 of supply versus provincial energy demand.

12 The first matter would be to devote  
13 increasing amounts of capital to exploration and development  
14 in Petroleum fields such as the recent injection of  
15 provincial funds to the Syn Crude operation in the  
16 Athabasca tar sands. A second method would be of  
17 course as is currently being done to increase rates to  
18 domestic consumers, such that the finances are generated,  
19 I suppose secondarily with the wallop to the pocket  
20 book that consumers are forced to learn conservation  
21 methods.

22 The third tack of course would be  
23 to explore this nuclear produced power, and in this  
24 regard I refer to a recent speech in Timmins by the  
25 Energy Minister, Mr. Timbrell, to the Local Engineering  
Society, in which he indicated to the meeeting, at that







2-7 1 point, that nuclear power is in fact the most favoured  
2 policy of the Provincial Government at least at this  
3 time.

4 A fourth tack I suggest would be the  
5 means that this Commission I think should consider with  
6 a great degree of consideration the concept of solar  
7 energy, which is currently very unexploited; and again  
8 having reference to the Honourable Mr. Timbrell's speech  
9 when he eluded to, in the main body of his talk, and of  
10 course pervading, the whole background of this issue,  
11 was the concern of environmentalists and many of us  
12 here tonight I am sure are aware of the issue of  
13 conservation actually itself. It remains to be seen,  
14 in my eyes, just how long it would be before the evident  
15 conservation pervades the thinking of Ontario Hydro,  
16 which of course we are all aware of, until a very  
17 short years ago lived and advertised by the policy " Live  
18 Better Electrically."

19 I note, with no disrespect, in last  
20 night's press locally there was an ad run outlining  
21 the various means of consumption, implements in the  
22 home such as T.V., radios and electric toothbrushes and  
23 so forth. This is really the kind of thing that  
24 consumers are very interested in learning and finding  
25 out about.

For example, it was pointed out here





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1 tonight, the fact I think that Dr. Stevenson pointed  
2 out vapour lamps, as you indicated, are very energy  
3 efficient. It is a very interesting thing to learn.  
4 It was astounding to me to learn that.

5 Another thing, for example I would  
6 like to know, a very basic thing. What kind of surge  
7 of power, what is the -- what is the comparison between  
8 the surge of power in turning a television set on, and  
9 turning it off for half an hour, and then turning it  
10 back on again, vis a vis just leaving the T.V. set  
11 on for half an hour. Is it more energy efficient to  
12 leave it on, or is it more energy efficient to turn  
13 it off?

14 Eluding to this means of, dealing  
15 with this bottleneck again. The first matter of devoting  
16 increased amounts of capital to Petroleum oriented  
17 derivatives of electrical energy. I suggest this means  
18 eventually, does to obsolescence at this point in time  
19 it is impractical to Ontario Hydro to totally ignore  
20 those means.

21 Firstly I would like to draw to the  
22 Commission's attention and of course probably it is  
23 blatantly obvious, the fact that we have a total  
24 absence in the nation at large of a National Energy  
25 Policy, despite the dramatic statement recently  
announced that we as a nation are about to become net





1 petroleum importers by the year 1982, leaves the provinces  
2 capable of pursuing provincial policies of their own.  
3 And if you listen to the conflicts between Ontario and  
4 Alberta, and you know the result of this is apparent  
5 in the fact were Ontario a consumer of natural gas their  
6 bills this year will be increased by 50 percent.

7 This is only five years following  
8 an address by Prime Minister Trudeau to a Carlton  
9 University audience that we ought to selling our  
10 petroleum for good hard cold cash. Further dependence  
11 on Ontario Hydro petroleum derivatives like this I  
12 suggest are going to continue to exacereate provincial  
13 conflicts of this nature, and I find it difficult to  
14 justify.

15 Secondly, another long range  
16 consideration that the provincial citizens must consider,  
17 and Canada as a whole, is going further afield than  
18 just for example the Athabasca tar sands and Syncrude  
19 project. Considering the Arctic oil energy deposits,  
20 and the conflict of getting that supply to market.  
21 With the native land claims, which are obviously  
22 becoming more and more concerned to the native rights  
23 leaders across the country, and in this regard  
24 particularly, I draw the Commissioners' attention to  
25 the claims of the Indian people in the Mckenzie River  
Valley.







2-10 1 With all due respect to the vested  
2 interest of course in the pipeline projects and the  
3 Petroleum Corporations, I think it is becoming more  
4 apparent that with this issue coming to the fore front  
5 as it is, I would suggest that it becomes apparent  
6 that the Native Right People in the Mekenzie River  
7 Valley, are not going to be quite as complacent in  
8 following the James Bay Cree Indian Land Settlement  
9 claims, as has occurred in the North Western part of  
10 Quebec.

11 The comments of Prime Minister  
12 Trudeau, undercutting really the whole concept of  
13 the Berger Enquiry suggesting at the outset, in the  
14 first few days of the enquiry; if the nation needs  
15 that oil, we need those resources, regardless of the  
16 findings of the Berger Enquiry, we are going to take  
17 that pipeline through. I suggest certainly it must  
18 rankle the mind of many of these Native Rights Leaders  
19 in the North Western part of the country. It obviously  
20 leaves the whole project, should it be dealt, should  
21 the National Energy Board consider it worthwhile to put  
22 that pipeline through, to open to sabotage violence,  
23 which may of course rebound, not only on Ontario  
24 citizens, but of course on all Canadians.

25 In respect of this oil situation,  
and the fact that he has indicated that our National





2-11 1 leaders are expecting to become net importers by  
2 1982, and the lack of a National Energy Policy it's  
3 made in a converse situation, in that we find that  
4 Ontario Hydro investing hundreds and hundreds of  
5 millions of dollars in oil fired generating stations  
6 like the Lennox Generating Station near Kingston, and  
7 I understand another one planned for a place called  
8 Wellesley, Ontario.

9 DR. STEVENSON: It is just near  
10 Port Hope.

11 MR. SLOAN: I see. It find it  
12 incongruous, that despite this pronouncement that we  
13 are going to become net importers of petroleum, that  
14 planning of this nature continues and both very poor  
15 provincial planning, and the citizens of Ontario are  
16 going to pay for this gross error for many years to  
17 come.

18 Now, Mr. Bordeleau of course has  
19 no opportunity of replying to what comments I am  
20 about to make, but I feel with all due respect to  
21 him and his presentation, that the tactic of increasing  
22 domestic consumption rates is not the best tactic to  
23 take. I appreciate his comment that this is complimentary  
24 with education, and seems to be the best path.

25 However, we have in Canada today  
very big Government which is inducing, or generating





1 a great deal of frustration among all citizens; and  
2 dealing with all various levels of bureaucracy, that  
3 the hostility engendered by such a tactic among all  
4 citizens, of increasing energy rates wholesale by  
5 25 or 29 percent amount over a period of a couple of  
6 years is excessive, it is just going to make people  
7 so angry that they are just going to -- sooner or  
8 later the straw is going to break the camel's back.

9 These types of means of dealing  
10 with the problem I suggest strike at the real roots  
11 of our whole society, and the legitimacy of  
12 institutions such as Ontario Hydro.

13 Now, whether or not the application  
14 is justified, whether it's legitimate, remains to be  
15 seen, and will be decided upon in the Parliament  
16 Committee, but in the absence of any information given  
17 to consumers of Hydro as to what methods of conservation  
18 are being used by Hydro to justify their rate increase,  
19 I suggest that this type of approach is just not  
20 fair to the consumer, and I suggest it is a two-sided  
21 picture.

22 If Ontario Hydro is to come out  
23 with a demand for 25, or 29, or 40 percent and not be  
24 required to disclose what methods of conservation are  
25 currently being used. It's a two-sided picture. To  
simply request a rate increase without more, I submit







engenders the reaction alluded to above.

Now, the third tack as I indicated is to rely on nuclear power as the method of the future; and as suggested by Mr. Timbrell will be a major factor in production of electrical energy in the Province in the future.

I submit that there are just too many unknown risks in the nuclear field at this time, to justify this dependence on this concept. Risks such as thermal pollution; as indicated, as eluded to by one of the Commissioners, low level routine releases of radioactivity, within the plant and without the plant. Radiation exposure of people involved in the mining of uranium. Possible contamination of the environment by a large amounts of highly radioactive wastes, which must be flawlessly stored for thousands of years, due to that long half-life of the waste itself.

The chance that a catastrophic accident might occur; I think the Atomic Energy Commission of the United States has gone on record as saying that it is possible that a catastrophic accident might occur, one chance in a thousand, that possibility exists.

The possibility of sabotage of facilities by terrorists, or the theft of fissile





1 material such as plutonium.

2-14 2 Really I suggest the major problem  
3 here we can deal, I think we can deal technologically  
4 with many of those problems such as waste, heat, as  
5 indicated that's a major concern. Given eutrophication  
6 of the Great Lakes as is, we are all aware of. But  
7 the most attractable problem here is the disposal  
8 of the radioactive waste, which as I indicated has  
9 such a long half-life, and I suggest it's not just,  
10 it's just not possible to guarantee at this time, at  
11 this stage in time, that the wastes that will inevitably  
12 be the after-effect of nuclear product can be safely  
13 stored. Any system that is governed or managed by  
14 humans is subject to human error. The storing of the  
15 radioactive wastes, in whatever kind of facilities,  
16 such as impermiab<sup>all</sup> geological formation or concrete  
17 mausoleums, /- very well protected perhaps from  
18 environment, nevertheless must be managed by humans  
19 and the possibility of human error cannot be discounted;  
20 sabotage; earthquakes; etc.

21 Two of the Chairman's former  
22 colleagues at MIT, who he is no doubt very familiar with,  
23 Doctor Kendall and Doctor Forbes, conclude in a study  
24 that within 10 years there may be a catastrophic release  
25 of nuclear activity from an operating nuclear power  
reactor. This is in regard to the American situation.





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I wish to draw the Commissioners' attention to a study reported in a book called " The End of Affluence" by Dr. Paul Erlich called the Wash 740 report, which has been reported upon in the A.E.C. and originally done in 1957 and updated in 1965. It was suggested, it studied the possibility of a small nuclear accident, of a small megowatt production facility, located 40 miles from any small city.

This up-dated report suggested a strong possibility of 45,000 deaths; the possibility of hundreds of millions of dollars worth of damage in an area the size of Pennsylvania.

Terrorists have a ready-made recipe for nuclear demolitions projects in the New York Magazine of December 1973, and individuals warped enough to consider such tactics, as we have seen at the Munich Olympics, and so forth; might resort, it's quite possible to shanghaiing a caravan of vehicles or vehicle transporting nuclear waste to a burial ground, or perhaps even developing a black market for waste fissile material such as plutonium.

A provincial energy policy, I suggest so heavily oriented to nuclear power to the almost total exclusion of solar produced energy, is a very sad prospect for all residents of Ontario; Ralph Nader has commented that perhaps the reason for the







-16

1 unadvanced state of engineering in this field, in the  
2 solar energy field, is the fact that the major  
3 petroleum corporations do not have a monopoly on the  
4 sun's rays, and this seems to be a fair accounting of  
5 the situation.

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1 I suggest that Ontario Hydro has a  
2 major role to play here, and perhaps Ontario Hydro  
3 in combination, or in conjunction with the Ontario  
4 Housing Corporation could develop some sort of  
5 experimental program in some of the homes in the new  
6 sub-divisions to just see how this possibility works  
7 out.

8 I read in a recent weekend magazine  
9 article which referred to a young man in Gananoque  
10 who has been able to produce his own system for the sum  
11 of \$10,000. Has produced a solar heating facility  
12 which he uses almost to the total exclusion of other  
13 heating. Amortized over the life of a house, and having  
14 regard to today's current rates this appears to be a  
15 reasonable figure and a justifiable economic outlay.

16 Now, Mr. Timble in a speech recently  
17 indicated there were several projects that the Ontario  
18 Government is currently involved in, with respect to  
19 solar energy, but I suggest that probably nine out of  
20 10 people here tonight, probably 99 out of 100 are  
21 totally unfamiliar with this, and have a right to know  
22 what is going on in the solar energy field, and I think  
23 that the Ontario Hydro facility has an obligation to  
24 publicize what money is available, for example, by way  
25 of loans, or rents to develop experimental facilities  
and simply to make a much greater awareness of this





1 concept. These are my submissions, commissioners.

2 DR. STEVENSON: Thank you very much,  
3 Mr. Sloane. It is a submission I submit which has  
4 probably gone well beyond what we had any reason to  
5 expect by reason of the short notice that we gave people  
6 to prepare them.

7 You have done a lot of work, we have  
8 your written submission, we have a verbatim transcript  
9 of what you said tonight for the record too, so if you  
10 added to it, and if you didn't, we have that as well.

11 MR. COSTELLO: Not really very much.  
12 I don't want to take up too much time, you covered a  
13 number of very good points here. Some of which we have  
14 heard referred to before.

15 I keep wondering about the search  
16 for solar energy does really belong in the Federal  
17 Government's backyard I think that's all I have to  
18 say.

19 THE CHAIRMAN: Dr. Porter.

20 DR. PORTER: Mr. Sloane, that is an  
21 extremely impressive contribution to the work of this  
22 Commission. We as you know set up these preliminary  
23 meetings ordinarily to identify major issues. I haven't  
24 counted how many major issues you have identified in here,  
25 but my guess is it is at least 20, and some of these  
will be debated in very considerable depth, I hope, when







we come to the main part of the Enquiry.

Your observations relating to nuclear power, are of course particularly relevant. It is an interesting thing you mentioned MIT the Association of Concerned Scientists. It is an interesting fact too that one of the leaders on the other side is also of MIT and the report you may have heard of to the Atomic Energy of the United States assessing the hazards of nuclear power generation. And this you see, ladies and gentlemen, as we see it, is a very basic reason why only the people can come across with a view, and the feeling as to what they want. Because certainly the scientists are divided on this issue of nuclear power. There is no doubt about that.

There are many, many -- risks are going to be taken whether you burn fossil fuel, or whether you burn nuclear fuel, or even if you cross the road, or even if you live in a high rise apartment. Interestingly enough, it's not so much the risk of an elevator not working, or starting, but the risk of exposure to costly radiation, which the higher you are in the building, the more intense the radiation, and this is completely and absolutely unavoidable.

So, I just, there is so much here that one would like to comment on, and perhaps question on, and all I can say is that I hope when the main





3-4 1 enquiry gets going, and particularly in connection with  
2 some of the major points you raised, that you personally  
3 will be there to present some of these ideas. I think the  
4 studies you have undertaken must have taken a considerable  
5 amount of time, and I personally as chairman of the  
6 Commission, thank you very, very much. I don't know  
7 whether Bob, maybe he concurs?

8 MR. ROSEHART: I think you have raised,  
9 as Dr. Porter mentioned at least 20 potential areas,  
10 perhaps even 30. I think the very difficult thing  
11 here is that scientists usually have two hands. On the  
12 one hand there is this, and on the other hand there is  
13 something else.

14 It is very difficult making a decision,  
15 or evaluating technical opinion. I think as Dr. Porter  
16 said, hopefully the public can be of assistance in  
17 making such judgements.

18 MR. SLOAN : What I was attempting to  
19 suggest at the beginning seems to be this condemnation  
20 of tacks and my own personal opinions are we should  
21 reduce concentration on several of them and increase the  
22 emphasis on several others. These are my personal  
23 feelings after having thought about some of these things  
24 for quite some time.

25 I know by way of retrospect that I  
haven't eluded whatsoever to the issue of coal. The coal





3-5 1 issue and the amount of energy. We have, of course, in  
2 the province of course, we have to consider in this  
3 respect the degree of sulphur in the coal. I suggest  
4 that in the trade off of environmental contamination  
5 by sulphure dioxide gas emission from coal fired plants  
6 such as Nanticoke, doesn't justify the current damage.

7 I heard recently, for example, that the  
8 Scandinavian countries are finding that their environment  
9 is being so drastically contaminated by sulphur dioxide  
10 fall out from Europe, particularly the industrial areas  
11 of the Rhur Valley in Germany, that many of their lakes  
12 are dead, fish are dying.

13 It is a planetary problem and I suggest  
14 a poisoning of the atmosphere is not a justifiable  
15 trade off for the amount of power that we need. I just  
16 don't see it justifies it. There are so many areas  
17 of exploitation I have not raised as yet, that we don't  
18 need to be thinking in those terms as yet, I don't think.

19 THE CHAIRMAN: Mr. Sloan , thank  
20 you so much. I want to just observe that when you asked  
21 what is going on in the solar energy field. I think I  
22 can say that it is our intention to try to maintain a  
23 number of these bulletins, contact bulletins from time  
24 to time, and we hope the Commission will be able to  
25 assist in the public education energy area. We will  
adjourn for 15 minutes.







1 ---SHORT RECESS.

2 ---UPON RESUMING:

3 THE CHAIRMAN: We would like to  
4 recognize the presence of Mr. Bill Perrier, the NDP  
5 member, and I wonder if you have any comments, or  
6 observations you would like to make tonight.

7 MR. PERRIER: Mr. Commissioner,  
8 ladies and gentlemen, I am very happy to hear of some  
9 prospects of developing a concept around those deposits.  
10 I know that it is still in the exploration stage, and  
11 quite a bit of research has been done and the Coal  
12 Company I think is near the end of their exploration stage;  
13 but from the point of view of economically having an  
14 impact, on the development of that resource there would  
15 be of greater significance. And while there are some  
16 problems of a lot of moisture in that lignite I think  
17 that perhaps these may be overcome, and I think the  
18 additional source of power for this part of the province,  
19 and I hope it would be on a fairly economic basis.

20 I share the concern that Mr. Sloan  
21 mentioned about the drive towards nuclear power, and  
22 the concerns about how you deal with this nuclear  
23 waste. You say it is a point of where scientists are  
24 on two sides of the issue; but I wonder if Hydro is  
25 wise in going so far, so fast, into the nuclear side of  
power generation .





1 I do feel the concerns that the  
2 alternative methods, such as solar power, and wind  
3 power, while there is research going on within the  
4 Ministry, and some thought is certainly being given to  
5 it, that in terms, the period that you are going to  
6 be making recommendations for, that you give consideration  
7 to perhaps how those kinds of energy can fit into the  
8 future means of supply for us here in the Province of  
9 Ontario.

10 Beyond that, I don't want to take up  
11 time, because I know others have prepared and I haven't  
12 got any major views. I brought this forward, and I  
13 appreciate the chance to welcome you and wish you well  
14 in your public participation, and in your studies.

15 THE CHAIRMAN: Thank you very much,  
16 Mr. Perrier, I am hoping that perhaps we will hear more  
17 about the Onakawana. The City of Timmins shortly handed  
18 us a copy of a brief by Mr. R.H.Pope. Mr. Pope, would  
19 you like to summarize the brief for us tonight?

20 MR. POPE: Thank you, Mr. Chairman,  
21 commissioners, and ladies and gentlemen. The advantage  
22 of being near the end is that you can be brief.

23 Some of the ideas that have already  
24 been expressed here are of some interest to myself  
25 personally, having been involved in the Hydro rate case  
here of recent vintage. Certainly the issue of capital





1 funding why Ontario Hydro is of great concern. I feel  
2 that more public participation there is definitely  
3 required rather than seeking capital in U.S. markets,  
4 and indeed in EURO markets. And I think this is an area  
5 that Hydro is going to have to concentrate on in the  
6 future.

7 However, that is not the issue that  
8 we are dealing with here. Our brief reads as follows.

9 " The City of Timmins welcomes the  
10 establishment of the Royal Commission on Electric Power  
11 Planning and hopes in the months ahead along with other  
12 Municipalities in the Province of Ontario to make some  
13 contribution to the studies and deliberations which will  
14 be carried out by the Commission.

15 " Since this Municipality is located  
16 in that part of the Province where it is anticipated  
17 that growth potential exists both in the natural resource  
18 industries and other related industries the necessity for  
19 the availability of electric power and energy for the  
20 development of industry and for the population growth  
21 of the North is of very great importance. Not only must  
22 electrical power and energy be available to permit and  
23 support the industrial and population growth, but it  
24 must be available at prices to permit the industries to  
25 compete both in National and International markets.

" The City of Timmins and, indeed,







1 all of the Municipalities in the Province of Ontario  
2 by virtue of their membership in the Association of  
3 Municipalities of Ontario have been extremely interested  
4 in the affairs of Ontario Hydro and especially with  
5 respect to the submissions made before the Ontario Energy  
6 Board in the most recent rate case. The Municipalities  
7 of the Province at that time expressed their concern with  
8 the necessity for the substantial increase in Ontario  
9 Hydro rates and, indeed, the need for adequate cost controls  
10 and for improvements in the level of efficiency and  
11 productivity of this very substantial public utility. The  
12 Municipalities are also concerned with the basis on which  
13 future growth of Ontario Hydro through its capital  
14 expenditure projects will be both controlled and financed.

15 " It is felt that one of the areas  
16 of concern should be to establish whether or not the  
17 generation of electrical power from hydraulic sources  
18 within the Province of Ontario have been developed to  
19 their full potential. Obviously, this must have been a  
20 matter of concern to Ontario Hydro over the years but  
21 likely there has been a tendency to locate generating  
22 plants in the more densely populated areas of the  
23 Province and to construct there substantial generating  
24 capacity. With rapidly escalating costs for all forms  
25 of fuel to supply the needs of generating plants it  
appears that some re-examination of the economic aspects





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1 of such generating plants and the development of further  
2 plants in the years ahead is of some import. It may  
3 well be that the capital costs of hydraulic generating  
4 plants are initially substantial but it does not appear  
5 that the operating costs of such plants are low in  
6 comparison to the generating plants requiring substantial  
7 quantities of fuel. We, therefore, in Northern Ontario  
8 are concerned as to whether or not the full potential  
9 for the generating of electric power by hydraulic means  
10 has been exploited. When looking at a map of Northern  
11 Ontario one is impressed by the many rivers and lakes  
12 which appear. In this context one conjectures as to  
13 whether or not the full potential for the generation  
14 of power by hydraulic means has been developed. Similarly,  
15 one is inclined to reflect as to whether or not any  
16 increase in capacity would be available from present  
17 hydraulic generating sources by modification or  
18 expansion.

19 " Similarly, an area which obviously  
20 requires some further consideration by this Commission  
21 is the availability of fuel for the fossil fired  
22 generating plants presently in operation by Ontario  
23 Hydro. Availability of sources of supply at realistic  
24 prices over the long term is of some considerable  
25 concern. It may well be that the past planning of  
Ontario Hydro for the availability and continuity of





1 fuel supply has been somewhat inadequate.

2 "The Municipality also feels that the  
3 interchange of electric power with neighbouring provinces  
4 is a matter which should receive consideration. Co-opera  
5 tion with neighbouring provinces should result in the  
6 availability of electrical energy on a reasonable base and  
7 the establishment of of a complimentary power grid. One  
8 is often left with the impression, although possibly  
9 mistaken that the co-operation between Ontario Hydro and  
10 neighbouring provinces with respect to the utilization  
11 and the development of electric power has not been the  
12 best. The neighbouring provinces have in the past and  
13 in more recent years found it necessary to make  
14 arrangements for the sale of excess electrical energy to  
15 public utilities in the United States located on their  
16 southern boundaries. The flow of this electrical energy  
17 through the Province of Ontario could perhaps alleviate  
18 some of the problems which are being faced by Ontario  
19 Hydro today.

20 "Another area for some concern is the  
21 policy of Ontario Hydro with respect to the exporting of  
22 electrical energy to the Unites States and the pricing  
23 of the same. The subject of secondary energy sales was  
24 referred to in some considerable depth in the recent Ontario  
25 Hydro rate hearings. An allied area of concern is the  
sale of electrical energy to various customers of Ontario







1 Hydro on an interruptible basis when in actual fact the  
2 interruptible aspect might be more notional than  
3 factual. If, in fact, preferential rates are permitted  
4 for interruptible power which is never interrupted when  
5 the users of that power may have a tendency to be  
6 wasteful at a time when the availability of electrical  
7 power is of vital concern and during a period of  
8 escalating costs.

9 " Conservation of electrical energy  
10 is an area which will undoubtedly be receiving the  
11 concern of this Commission in the months ahead and it  
12 would appear to be a very important issue and might  
13 well offset some of the substantial capital costs which  
14 are required in the expansion of the system to provide  
15 additional capacity in the years ahead. Conservation of  
16 use by the public and conservation through the design  
17 of plants and buildings should obviously receive  
18 consideration and priority.

19 " These are merely a few of the issues  
20 that come to mind at a preliminary meeting of this  
21 type with your Commission and as previously indicated the  
22 of  
23 City/Timmins along with all of the other Municipalities  
24 within the Province welcome the opportunity of providing  
25 some meaningful input to your Commission in the months  
ahead."

THE CHAIRMAN: Thank you very much,





1 Mr. Pope, for your thoughtful submission. I am sure  
2 that we can adequately explore the questions you raised  
3 tonight. Certainly we will be asking Ontario Hydro  
4 to tell us what their plans are for future hydraulic  
5 development in the North; and when the formal round  
6 of hearings starts, I hope we will have full opportunity  
7 to examine them in the North, amongst the people that will  
8 be affected by them.

9 Bob Rosehart, you indicated that there  
10 may be one or two other sets of submissions.

11 MAYOR OF TIMMINS: I want to give you  
12 a number of tips. This a very big Province, some time  
13 ago Mr. Frost and Mr. Robots made reference to five of  
14 the largest river systems on the North American continent,  
15 and we have them. Especially Mr. Bordeleau is sitting  
16 on one of the tributaries. With all the tributaries  
17 that are close to these big rivers, we have had hydro  
18 producing plants and Sir Adam Beck with his views earlier  
19 in the century who put all these things together and had  
20 a look at these things, and you know we had about 21  
21 mines here at one time and we produced hydro, the  
22 Mattagami, which is a big river too and controls the  
23 Moose. And one of those lines was done away with.  
24 I think Hydro can produce some more electricity here  
25 hydraulically and I think that the native people living  
on these rivers can make a good suggestion to us, and





-14  
1 we can get together with them and really put some power  
2 plants, and as a matter of interest to you, some  
3 years ago, somebody was telling us they were short of  
4 fresh water in Southern Ontario and we had the idea of  
5 taking the water through a pipeline and giving them some  
6 fresh water. However, somebody in the States heard  
7 about that, they wanted to buy the water from us and then  
8 somebody from Canada took us real serious and wrote us  
9 letters telling us not to sell our good water.

10 So I am just wondering what people  
11 have against as using water for producing energy, and  
12 Mr. Bordelaeu put his finger on it of course, but I  
13 sometimes wonder about Hydro, they advertize in one  
14 breath on the radio to use hydro it's good for heating,  
15 and hot water, and then we hear about two hours later,  
16 conserve energy.

17 You know, I think that Sir Adam  
18 Beck thought when he was producing the company called  
19 Hydro that he had to have customers, or he wouldn't  
20 have any income, and I think the old wheel is turning.  
21 I don't care how many people say we should conserve  
22 energy, but if you all conserve energy Hydro may go broke  
23 instead of producing more hydro.

24 Two communities, I don't know how many  
25 people know this do not have public utility, communities  
of good size, and this is Timmins and Kirkland Lake,







-15 1 and we certainly have a different, sometimes a different  
2 view of hydros, and sometimes I think that these people  
3 who sit on Public Utilities Commissions are not coming  
4 out with enough suggestions. I hope you are talking a  
5 lot of that with your questions and information.

6 Now, as Mr. Pope has put it, we  
7 will be giving you more ideas, or suggestions in the days  
8 to come, and we have the Association of Municipalities  
9 of Ontario, and we realize, Doctor, that we have  
10 discovered some things that might be of great assistance  
11 to the Hydro Electric Power Commission.

12 So that with that, I would just like  
13 to remind you that we have five of the biggest rivers  
14 on the continent. Maybe we had better have a look at it  
15 and ask the assistance of the native people, because  
16 some of them have come to me with very good ideas. One  
17 fellow lives in Peterborough and he had some very good  
18 ideas. I hope when you get to Peterborough that he does  
19 make a presentation.

20 MME. PLOURDE-GAGNON ( in French): Do  
21 you think there is an imbalance between the invitation  
22 from Hydro to use electric energy, and the other one  
23 to conserve energy, is that it?

24 THE CHAIRMAN: Yes, would you identify  
25 yourself?

MR. DUZEL: Mike Duzel. Good evening,





3-16 1 ladies and gentlemen of the Commission. I was not  
2 prepared to make a statement over here, or make a speech,  
3 but a few things caught my eye in a few speeches tonight,  
4 and I was working on it for a little while now, and  
5 I have one page over here that is telling different  
6 how to insulate a house to conserve energy. As I go  
7 through this page over here, it seems to be quite an  
8 impressive ad, but the instruction about insulation  
9 is somewhat mixed up, and I don't think it's as attractive  
10 as they suggest it is.

11 I think best thing if I just read  
12 a couple of columns here. I was preparing for NRC  
13 for the insulation. The heading over here is " Are you  
14 heating your home, or wasting", and then it explains  
15 over here what you are heating and how you, the heat  
16 escapes from your house. So it says over here: " infor-  
17 mation about insulating home etc." When the house has  
18 already been built the old traditional way it's too  
19 late for insulation construction in existing structures.

20 For instance has got to be drastically  
21 changed, not necessarily in cost. A lot could be done  
22 with a new building if the following rules were  
23 respected.

24 First a man; second seal, atmosphere  
25 vapour seal, and method of insulation. Method of  
insulation is the trick here, it seems to me that this





page is missing. How you do it to insulate.

They say put in six, seven inch insulation, that is supposed to do something for you. If you have your spots between that your spots are the ones that the insulation leaks. Your leak goes to the wall, doesn't matter if you have five, six, or seven inches.

This is where I prepare little bit more about insulation here, for National Research and what they think about it. It's too bad for this part of the country, with, especially some of the new sub-divisions they are building here, and the heat load will be so terrific because the insulation will -- well, they do put insulation products in there, but in fact it cannot be, it's impossible.

So there is more to this here, but I don't think, this time or place to release, but I can leave a copy of this, I only have one here, then to top this off I don't know if this a joke or something we should have looked into. I think that very seriously for the next 20 years or so.

It says over here to live a man use, manpower, wood, coal, car, oil, electric power and uranium, wind, etc. Most of those are practically used up, some are very serious, electricity. Each time another generation station is built the pressure back and forth is destroyed more or less.







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1 Uranium, it may be dangerous in the  
2 long run, it has been used to a great extent in the  
3 past, it could be used again near to the modern technology  
4 and utilities. Utilized for domestic chores, generating  
5 and charging storage batteries to drive for heat,  
6 domestic utilities.

7 Also in the same token in the same  
8 system, life saving manual units. Well known weight  
9 reducing cycle equipped with alternator. Or heavy duty  
10 two or four man machines. After all, we have too many  
11 people and not enough natural resources.

12 This may not be the most modern  
13 invention, but it may be better than freezing to death.

14 The computer is telling us that in  
15 20 years the earth's population will double. We all  
16 know that.

17 This will be all I can present here  
18 at this time. Thank you very much for asking me on  
19 such short and unprepared notes.

20 THE CHAIRMAN: Thank you very much.  
21 If you have anything you would like to leave with us  
22 we would appreciate it very much.

23 ---Meeting adjourned.  
24  
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# THE ROYAL COMMISSION

## ON

# ELECTRIC POWER PLANNING

*Preliminary Meetings of the Royal  
Commission on Electric Power Planning*

**DATE:** Nov. 13, 1975 **TIME:** 2:00pm

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MEMBERS OF THE COMMISSION:

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DR. ARTHUR PORTER - CHAIRMAN

17

18

ROBERT E. E. COSTELLO, ESQ. MEMBER

19

MME. SOLANGE PLOURDE-GAGNON MEMBER

20

GEORGE McCAGUE, ESQ. MEMBER

21

DR. WILLIAM W. STEVENSON MEMBER

22

23

24

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VOLUME 5

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1 --- Upon Commencing at 2:00 p.m.

2 THE CHAIRMAN: Ladies and Gentlemen  
3 may we come to order, please? This, as most of you  
4 know, is the second phase of our public meetings  
5 in Toronto. Our preliminary public meeting, that  
6 is. As usual on this occasion I have great pleasure  
7 in introducing my fellow Commissioners. Of course,  
8 we see their names and can identify them, but I  
9 would just like to say a couple of words about each  
10 of them.  
11

12 Madam Solange Plourde-Gagnon from  
13 Ottawa, Journalist, and I used to say housewife and  
14 mother of three, but I have been ticked off so many  
15 times for saying this that I now don't say it.  
16

17 Solange is the consumer expert, shall  
18 we say, or consumer commissioner. That is the  
19 Commissioner who will be responsible for consumer  
20 aspects of the Commission's work.  
21

22 MADAM PLOURDE-GAGNON: Bonjour. Welcome.

23 Commissioner, Bob Costello,  
24 Engineer and Industrialist, is the Commissioner who  
25 will be paying special attention to the priority  
26 projects which you see in our terms of reference  
27 as a significant part of the work of the Commission.  
28

29 George McCague, Farmer, Agriculturist,  
30 adviser on agricultural affairs to this Government,





1 Government of Ontario, and the Government in Ottawa,  
2 the Federal Government. George will, of course,  
3 as it is pretty obvious, be concerned with the  
4 farmers' problems and the issues relating to land  
5 use and agriculture in general.

6 And then Bill Stevenson whom many of  
7 you recognize as a member of the Ontario Energy Board.  
8 We have rather more of his time than the Ontario  
9 Energy Board for which we are eternally thankful and  
10 can be increasingly thankful as every day passes.

11 Bill, as you probably know, is an  
12 Economist and has had very considerable experience  
13 and has done a great deal of work in the field of  
14 the economics of large electric power systems.

15 So these, ladies and gentlemen, are  
16 the Commissioners.

17 At this time, too, I would like to  
18 introduce Mr. Robin Scott, Q.C., who is counsel to  
19 the Commission, and Dr. Rosehart, Bob Rosehart, who  
20 is our scientific counsellor, and we will be hearing  
21 from both these gentlemen I am quite sure.

22 Well, I don't want to take up too  
23 much time with preliminaries. In the kits, the  
24 information kits, which most of you will have there  
25 is an agenda of the proceedings this afternoon and  
this evening and tomorrow morning. You will also







4  
1 find about three or four position papers which the  
2 Commission thought would be interesting background  
3 material for you, and perhaps all I should say at  
4 this time is to read out perhaps the major purposes  
5 of these preliminary meetings as they were set out  
6 in the press ads.

7 So the purposes are essentially then,  
8 first, to learn (and that is you and us) to learn  
9 about the terms of reference, objectives and impli-  
10 cations of the Commission. Those of you who attended  
11 the illustrated talk I gave last night, that is what  
12 that was in aid of, really.

13 Secondly, to discuss with the  
14 Commission the list of the issues either general or  
15 local which the Commission hoped to consider, and  
16 thirdly to discuss with the Commission the manner  
17 in which its Inquiry ought to be carried out; the  
18 procedures, timing and location of the public hearings,  
19 the dissemination of information to the public and  
20 the use of this Inquiry as a means of increasing  
21 the public's awareness of the relationship between  
22 electric power and the quality of life in Ontario.  
23 With special emphasis on the period 1983 to 1993  
24 and beyond.

25 As I mentioned last night, these





5      1      preliminary meetings have very definite educational  
2      2      overtones, two-way educational process; you educating  
3      3      us and hopefully we perhaps doing a little bit of  
4      4      educating ourselves.

5                      The session this evening will perhaps  
6      6      be slightly more informal than the session this  
7      7      afternoon, although I hope to treat this in as  
8      8      informal a way as possible because we find that  
9      9      sort of environment, informal environment, encourages  
10     10     people to get up on their feet and come out with  
11     11     any ideas and comments they may have. And these  
12     12     spontaneous comments very often of course, the most  
13     13     important of all.

14                    However, this evening there will be  
15     15     some briefs or submissions presented - only about  
16     16     four or five I think. The rest of the time will be  
17     17     free-for-all discussion, dialogue, in some respect  
18     18     between you and the Commission, and then tomorrow  
19     19     morning will essentially be a continuation of this  
20     20     afternoon when most of the time will be taken up  
21     21     in the presentation of briefs which we received in  
22     22     written form. So that is roughly the programme as  
23     23     we set it up.

24                    I am sure you will all wish us good  
25     25     luck in our endeavours, and perhaps on that note





6 1 I move to the first of the submissions. I wonder  
2 if Mrs. Jackson is here? Good.

3 Mrs. Jackson, would you like to come  
4 to the table here? There is a microphone here.  
5 Mrs. Jackson is a member of the Consumers' Association  
6 of Canada. Welcome.

7 Excuse me. Is that Mr. John Wilson?

8 MRS. JACKSON: No, this is Mr. Andrew  
9 Kerekes, our counsel, but we do have some other  
10 people. We have our four Vice-Presidents here, and  
11 Mr. John Wilson and a representative from the  
12 Toronto Association, Miss Jean Dixon, so that we are  
13 very interested in these proceedings.

14 THE CHAIRMAN: Yes.

15 CONSUMERS' ASSOCIATION OF CANADA (ONTARIO BRANCH)

16 MRS. RUTH JACKSON

17  
18 MRS. JACKSON: We would like to thank  
19 the Commission for making it possible for us to  
20 appear before you.

21 We feel that the work of this Royal  
22 Commission comes at a very crucial time in the  
23 development of electric power planning in this  
24 Province.

25 Ontario Hydro's system expansion







7 1 programme and its operating policies have a significant  
2 consequence for the general well-being of the people  
3 of our province. The work of this Commission is  
4 especially important at a time when Ontario Hydro  
5 projects an unprecedented increase in its system  
6 expansion programme with accompanying staggering  
7 rate increases; at a time when it becomes increasingly  
8 clear that we simply cannot afford in this province  
9 to follow the pattern of historical growth.

10 We believe that the concept of serving  
11 all demand for electrical energy needs to be  
12 questioned on the basis of broad public policy  
13 considerations. We have reached a time when it is  
14 imperative that we get some broad public policy  
15 restraint into Ontario Hydro planning, and the work  
16 of this Commission, we hope, will be most significant  
17 in this regard.

18 It is important as one approaches an  
19 examination of the long-range planning of electric  
20 power for Ontario to recognize that the history of  
21 Ontario Hydro has indeed been a dramatic success  
22 story. By and large this public utility has had  
23 an admirable record in seeking to provide Ontario  
24 with a reliable supply of electricity at a reasonable  
25 cost.





8      1                      This, of course, does not mean that we  
2                      should not be concerned with the fact that the  
3                      size and scientific mystery of this organization has  
4                      too often inhibited constructive, independent  
5                      criticism of its decisions, for as one observer has  
6                      put it, "Even public corporations are subject to  
7                      the follies of error, misjudgment and deceit which  
8                      usually complicates human affairs."

9                      All Ontarians should welcome the  
10                     establishment of this Royal Commission so we have  
11                     every reason to hope that it will provide a constructively  
12                     critical forum for the detailed examination of the  
13                     long-range plans and priorities of this giant public  
14                     corporation which has such a substantial impact in  
15                     so very many areas of the public life of this  
16                     Province.

17                    The Consumers' Association of Canada  
18                    has had a long-standing interest in Ontario Hydro;  
19                    over the past few years <sup>active</sup> our/involvement in this area  
20                    has intensified as the crucial public importance of  
21                    Hydro's planning has become more and more evident.  
22                    Accordingly, at the hearings of the National Energy  
23                    Board in 1973, the CAC undertook the first of what  
24                    has become a series of interventions with respect to  
25                    Ontario Hydro.    At that time we opposed an expansion





9 1 of Hydro's existing export licence as we contended  
2 that the social costs attendant upon increased  
3 exports would not be recovered by Hydro's estimated  
4 profits.

5 In the summer of 1974 we were full-  
6 time interveners at the Ontario Energy Board hearings  
7 into the rate application by Ontario Hydro for 1975.  
8 We felt that it was important that we participate  
9 in the OEB hearings because we felt that if the new  
10 public rate review mechanism was to be a meaningful  
11 departure from the previous structure, then it was  
12 important that the OEB receive effective argument  
13 from the representatives of the general public and  
14 not just from the old established interests. The  
15 Consumers' Association of Canada, with a membership  
16 of over 35,000 in Ontario, we feel represents a  
17 significant body of consumer opinion in this province  
18 that deserves to be heard. . Unfortunately, our  
19 ability to participate effectively in the 1974  
20 Ontario Energy Board hearings was severely restricted  
21 for financial reasons. However, it was our view  
22 that restricted participation was preferable to no  
23 participation at all. Accordingly, this past summer,  
24 despite our even graver financial situation we  
25 returned for the full fifty-five day hearings of  
the Ontario Energy Board into Hydro's 1976 rate







10      1      application.

2                      Over the next period of time, the  
3      Consumers' Association of Canada will be devoting  
4      a significant portion of its resources to its  
5      programs with respect to Ontario Hydro; we shall be  
6      intervening at the National Energy Board hearings  
7      into Ontario Hydro's export sales which will be  
8      held some time early in 1976; we shall be intervening  
9      once again before the Ontario Energy Board; we  
10     shall be continuing to participate actively on the  
11     variety of informal advisory committees which  
12     Ontario Hydro has established, and we hope to be  
13     an active participant in the proceedings of this  
14     Royal Commission.

15                      We have examined the paper entitled  
16     "Preliminary Statement on Issues and Concerns"  
17     released by the Commission on October 29, 1975.  
18     We find it a source of satisfaction that the Royal  
19     Commission proposes to take a broad and comprehensive  
20     approach to its responsibilities. We have had  
21     lengthy discussions with other public interest  
22     groups and with Commission staff as to the nature  
23     of the tasks facing this Royal Commission, and we  
24     hope that we can continue these discussions on  
25     an informal basis.





11 1 In the time available today it is my  
2 hope to address the Commission on one very crucial  
3 area of inquiry in which the Consumers' Association  
4 of Canada proposes to take an active role.

5 Ontario Hydro is, of course, a public  
6 corporation, and as such, exists in a certain  
7 institutional framework and within certain institutional  
8 constraints. In our preliminary discussion with  
9 Commission staff, we have noted that the Commission  
10 proposes to deal with many of the issues that arise  
11 out of this institutional reality. It is our sub-  
12 mission that this must be done on a coherent and  
13 systematic basis. The research required includes  
14 both a comparative study and survey of literature  
15 approach. The CAC proposes to undertake this study  
16 under the joint direction of two of our members;  
17 one, an economist is Chairman of the Department of  
18 Economics at the University of Waterloo, and the  
19 other, a practising lawyer, with an MA degree in  
20 public administration, who has represented us before  
21 the Ontario Energy Board with respect to Ontario  
22 Hydro.

23 There are a great number of issues  
24 involved in the simple phrase "Ontario Hydro as a  
25 Public Corporation". For example, does Ontario Hydro





12 1 as a public corporation have a greater public responsi-  
2 bility than private sector organizations? Are there  
3 circumstances in which a public corporation should  
4 be required to do things which would not be expected  
5 of even the most public spirited private firm? If  
6 the answer is "Yes", how should Ontario Hydro go  
7 about exercising this public responsibility mandate?  
8 This type of inquiry may seem abstract; however it  
9 is fundamental to such issues as the desirability  
10 of exporting energy to the United States and Hydro's  
11 proper role in fighting inflation.

12 What is the role of public participa-  
13 tion in a public corporation? Can it be viewed as  
14 a surrogate for the private sector type of pressures  
15 faced by private organizations? What are the  
16 appropriate arenas for public participation and  
17 what sorts of trade-offs should be made between  
18 public participation and other pressing priorities?

19 The organizational structure of the  
20 public corporation is yet another fruitful area to  
21 consider. We ought to look at the extent to which  
22 public enterprise as affected, and in turn, been  
23 affected by a free enterprise setting. Shall the  
24 operating conditions of the public enterprise be  
25 made as nearly like those of business as possible?







13      1      To what extent should the public corporation enjoy  
2      2      business secrecy? To what extent should it be  
3      3      exposed to as many of the normal business costs as  
4      4      feasible, such as taxes? Do the operating conditions  
5      5      of a public enterprise as large as Ontario Hydro  
6      6      furnish an operating standard for other enterprises,  
7      7      public and private, in the energy sector and outside?

8                      And a variety of other issues with  
9      9      respect to organizational structure: we must look  
10     10     at the structure, composition and responsibility of  
11     11     the senior policy body within the organization; the  
12     12     special benefits and problems that the institutional  
13     13     reality of a public corporation creates in the  
14     14     area of labour relations must also be considered.

15                    In other areas, the relationship of  
16     16     the public corporation to government. Mechanisms  
17     17     for public accountability. Structures for financial  
18     18     control. The role of public regulation. An examina-  
19     19     tion of the public corporation as regulator with  
20     20     various models for that regulation.

21                    I have merely attempted to raise a  
22     22     few of the more interesting issues in a cursory  
23     23     and preliminary manner. We have almost finished  
24     24     preparing and will shortly be submitting a detailed  
25     25     research plan outlining in a systematic way the





14 1 proposed areas of inquiry that we feel should be  
2 examined with respect to the question of Ontario  
3 Hydro as a public corporation.

4 At the meeting of interest groups  
5 convened CELA and Energy Probe, we had an opportunity  
6 to discuss both formally and informally with other  
7 interest groups the nature of the work that we propose  
8 to do with respect to Hydro as a public corporation.

9 It was decided that the other groups  
10 would be agreeable to our doing the work if we  
11 proceeded with our research in two parts. Part One  
12 would be a survey of literature and a comparative  
13 study dealing with the types of questions I have  
14 briefly referred to, and Part Two would be an  
15 analysis based on CAC policy approaches to the materials  
16 collected in Part One. The Part One material would  
17 be distributed to other interest groups sufficiently  
18 before their formal presentation to the Royal  
19 Commission so that those interested in making their  
20 own conclusions would have it available for their  
21 use.

22 As I have said, we shall shortly be  
23 making a formal proposal to the Royal Commission on  
24 this matter.

25 It is our understanding that a number





15 1 of interest groups have made and will be making  
2 detailed submissions as to the procedures to be  
3 followed by the Royal Commission in its deliberations.  
4 We do not propose to make any detailed comments.  
5 We are confident that the Commission will conduct  
6 itself in accordance with principles of procedural  
7 fairness so that all those individuals and groups  
8 who have a substantial and serious interest will  
9 have an adequate opportunity to present their views.

10 We agree with the Commission in its  
11 statement as to The Public Inquiries Act that  
12 "It is appropriate that a Royal Commission not be  
13 restricted by the well-defined and formal rules  
14 which govern proceedings in our courts of law."

15 At the same time, however, we are  
16 pleased that the Commission also recognizes that  
17 there are certain minimum procedural rules which  
18 must be met, such as the right to "Call and examine  
19 or cross-examine witnesses personally or by  
20 counsel". We were concerned in some of our informal  
21 preliminary discussions with the Commission staff  
22 by the suggestion that extensive portions of these  
23 hearings be conducted without counsel. It was our  
24 feeling and the feelings of a number of other public  
25 interest groups that such an arrangement would put







16 1 certain of those appearing before you in a very  
2 difficult and even unfair position.

3 We were also pleased to hear of the  
4 possibility that the Commission may hold topical  
5 hearings. If this in fact is done, this would  
6 facilitate our participation greatly for we would  
7 appear only with respect to a certain number of  
8 clearly defined issues, and co-operate with other  
9 interest groups who have similar positions to ours  
10 when issues with which we are less directly concerned  
11 are being heard. This, of course, would not be  
12 possible unless hearings were phased on the basis  
13 of subject areas.

14 In this regard we would make the  
15 submission that the transcripts should be readily  
16 available at nominal cost for these interveners  
17 whom the Commission, in its discretion, deems to have  
18 both a substantial interest in the hearings and  
19 the lack of financial ability to pay the full cost  
20 for transcripts.

21 The whole issue of public funding  
22 we recognize to be a difficult one. We have consistently  
23 taken the position that being given a fair and  
24 courteous hearing in itself is not enough; fairness  
25 and courtesy must be combined with adequate funding





17      1      for preparation and for advocacy if the participation  
2      2      of public interest groups is to be meaningful.

3                      We will endeavour to participate to  
4      4      the best of our ability whether or not we receive  
5      5      financial assistance. However, unless significant  
6      6      funding is provided our participation will be limited  
7      7      in nature and will basically be confined to briefs  
8      8      of the kind I am presenting to you today. In our  
9      9      view, more needs to be done, and we are pleased  
10     10     that the Royal Commission appears to be taking steps  
11     11     to make public funding a reality.

12                    May I say in conclusion that members  
13     13     of the Consumers' Association of Canada have had  
14     14     the opportunity to meet with the majority of  
15     15     Commissioners, and many of this staff to date. Those  
16     16     of you that we have met have impressed us with your  
17     17     fairness, your ability and indeed your sympathetic  
18     18     understanding of the kinds of issues that we feel  
19     19     are so important to consumers in the years to come.  
20     20     We agree with the Chairman of this Commission that  
21     21     you are embarking on a formidable task of great  
22     22     consequence, so that what we will be doing together  
23     23     is a task no less than participation in the invention  
24     24     of the future.

25                    This Commission has been given an





18      1      important job to do. We wish you well and we pledge  
2      2      the assistance and co-operation of the Consumers'  
3      3      Association of Canada in the work ahead.

4                      THE CHAIRMAN: Thank you very much,  
5      5      Mrs. Jackson, for that very scholarly contribution  
6      6      and submission if I may say so. Very comprehensive.  
7      7      Very much to the point, especially concerning the  
8      8      question of issues and the format of all future  
9      9      meetings.

10                     I don't know whether Solange in  
11      11      particular would seek any clarification at this time.  
12      12      What our procedure is, any of the Commissioners or  
13      13      our counsel or counsellor might feel there are  
14      14      points that need clarification, so I am sure you  
15      15      won't mind if we address a few questions to you.

16                     MME PLOURDE-GAGNON: Since we started  
17      17      our public meetings, particularly in London and  
18      18      Windsor we had submissions from your Association,  
19      19      and you mentioned the importance of your participation  
20      20      as an Association. The ordinary people, consumers,  
21      21      can they participate more actively with our  
22      22      Commission? I mean the ordinary consumer is the  
23      23      taxpayer and the person who utilizes the electrical  
24      24      energy every five minutes of his life. Can you find -  
25      25      I don't know a better way of getting everybody, the







1 ordinary consumer, the woman, the housewife and  
2 everybody, the ordinary consumer, to participate  
3 more actively.

4 MRS. JACKSON: That is a difficult  
5 question. Of course we have the same problem in  
6 trying to get them to participate in all sorts of  
7 Consumer Association activities.

8 I think the informality that you have  
9 suggested for some of the sessions will let people  
10 who are perhaps not as familiar as we are with the  
11 more formal types of hearings - will give them an  
12 opportunity where they won't feel intimidated to  
13 come forward.

14 Often I am afraid some people aren't  
15 concerned enough, and this consumer apathy is  
16 probably the biggest thing we have to fight, and it  
17 may be the biggest thing you have to fight too. I  
18 don't know.

19 It is not very helpful I am afraid.

20 MME PLOURDE-GAGNON: Maybe we will  
21 start with you because we really need you. We need  
22 your participation as the Consumers' Association  
23 for that.

24 MRS. JACKSON: We hope to be surveying  
25 our members on certain questions connected with our





1 later presentations to you, and these can be done  
2 two ways. As far as we are concerned, we can either  
3 survey our own members or we can ask them to go out  
4 and particularly get other people, so that we may be  
5 able to help you in that regard.

6 MME PLOURDE-GAGNON: Thank you very  
7 much.

8 DR. ROSEHART: Just a minor point, on  
9 page 7 you give some details of your proposed study.  
10 Two things. How long do you think such a study would  
11 take, and secondly, could you elaborate on Part 2,  
12 which is an analysis based on Consumers' Association  
13 of Canada policy approaches to the materials?

14 MR. KEREEKES: Perhaps I might answer  
15 that, Mr. Rosehart. It is our feeling that Part 1  
16 of the study could be completed if it were begun  
17 perhaps by January, perhaps by late August or certainly  
18 early in the fall, and we would hope to have Part 2  
19 completed within two months subsequent to that.

20 Part 2 will be done in a manner so that  
21 our members would be consulted and our policy  
22 approaches would be put into Part 2.

23 Part 1 would be what we see as the  
24 major fact-gathering portion of the study, and we  
25 would attempt to do a comparative answer literature





1 type of approach so that we have some objective kinds  
2 of information available, which is the kind of thing  
3 that is generally lacking in presentations by our  
4 Association, and we feel is a service that we can  
5 provide both to the Commission and for our own  
6 presentation as well.

7 DR. ROSEHART: In Part 2 then you would  
8 be involving your provincial membership?

9 MR. KERKES: That is correct.

10 MR. SCOTT: Mrs. Jackson, my name is  
11 Robin Scott. I have a couple of questions that  
12 perhaps should go to your counsel. By all means  
13 don't feel cautious about getting help from him if  
14 you need it.

15 First of all, with regard to this  
16 study that you have been discussing with Mr. Rosehart,  
17 which you mention on page 7, can we take it that that  
18 study, both parts, are related more to the long-term  
19 issues that the Commission has to deal with rather  
20 than the priority projects; i.e. the North Channel  
21 generating station and the four transmission lines?

22 MR. KERKES: That is correct, Mr.  
23 Scott.

24 THE CHAIRMAN: Thank you very much.

25 MR. SCOTT: Excuse me, Arthur, I have







1 a few more. I shouldn't address you in such an  
2 informal way, of course, Mr. Chairman.

3 THE CHAIRMAN: If you start that  
4 nonsense, Mr. Scott, I will bring in the QC as well  
5 if you are not careful.

6 MR. SCOTT: Mrs. Jackson, I wonder if  
7 you could, or your counsel, could give us some help  
8 on this question: you mentioned that there should  
9 be a right to cross-examine during the formal hearings.  
10 Now I take it your counsel is probably familiar  
11 with the provisions of The Public Inquiries Act  
12 which indicate, and I am referring now to Section 5,  
13 sub-section 1, that a Commission shall accord to  
14 any person who satisfies it that he has a substantial  
15 and direct interest in the subject matter of the  
16 Inquiry, an opportunity - and I'll paraphrase -  
17 to cross-examine.

18 Now having regard to that statutory  
19 test, do you see that anyone, no matter what their  
20 interest, who wants to cross-examine should be  
21 permitted to cross-examine?

22 MR. KEREEKES: Mr. Scott, if I might  
23 reply. At page 7, that is why we said we felt in  
24 the discretion of the Commission anyone who had  
25 a substantial and serious interest should certainly





1 be accorded the right to a full hearing, and in the  
2 discretion of the Commission given the right to a  
3 full cross-examination.

4 MR. SCOTT: Thank you.

5 Do you see any function for Commission  
6 counsel to help persons organize a cross-examination  
7 or to put questions to witnesses on their behalf?  
8 Do you think that could be helpful?

9 MR. JACKSON: I think that certainly  
10 people outside of lawyers are often unskilled in  
11 the techniques of cross-examination, and no matter  
12 how important the issues they might be wishing to  
13 be making might be, they might be unable to ask the  
14 right series of questions to get it out.

15 Certainly I think that people should  
16 have the right to have their own counsel there if  
17 they wish. There will, however, I suppose be many  
18 interveners who cannot afford to have their own  
19 counsel there, and I think some help should be given  
20 in some way.

21 I really am not able to say whether  
22 it should be Commission Counsel or in some other  
23 form.

24 MR. SCOTT: Fine. Thank you.

25 Now could you tell me will you be





1 submitting any further formal material on the  
2 procedural point? Perhaps your lawyer could help  
3 you with that.

4 MR. KEREKES: Not at this time, Mr.  
5 Scott, I don't think. We are looking forward to  
6 examining materials that are being compiled we under-  
7 stand by the Sierra Club in particular and by a number  
8 of other interest groups.

9 We will be examining that, but for  
10 our more informal discussion we are satisfied they  
11 are making substantial proposals to you.

12 MR. SCOTT: One last question: would  
13 you welcome a pre-hearing conference either before  
14 the formal hearings on the priority projects or the  
15 long-range hearings to discuss matters of procedure?

16 MR. KEREKES: Mr. Scott, we do not  
17 feel that the pre-hearing conference at the OEB went  
18 terribly well at the OEB, but I think that is a  
19 step in the right direction and I think it would be  
20 helpful.

21 MR. SCOTT: All right. Thank you.

22 -----

23 THE CHAIRMAN: Dr. Townsend.  
24  
25







1 SJT CONSULTANTS LIMITED

2 Stanley J. Townsend, Ph.D., P.Eng.

3  
4 DR. TOWNSEND: I would like to give  
5 members of the Commission a short submission to cover  
6 what I am going to say verbally.

7 My name is Dr. Stanley Townsend. I  
8 would like to present the preliminary submission  
9 which our company is making to the Royal Commission  
10 on Electric Power Planning. We wish to submit more  
11 detail at a later date.

12 Essentially I will submit to the  
13 Commission a technical-economic argument to the  
14 effect that development of a CANHO MHD Electricity  
15 Storage System - CANHO, initials for  
16 Canadian hydrogen oxygen and MHD, initials for  
17 magnetohydrodynamics - present an argument to the  
18 effect that the development of that system and  
19 installation in multiple units in the Ontario Hydro  
20 Generation System during the ---

21 THE CHAIRMAN: Could you speak a little  
22 closer to the mike, please?

23 DR. TOWNSEND: Yes. Talks about  
24 installation in the Ontario Hydro generation grid,  
25 1983-1993, would make a major reduction in the cost





1 of generating electricity within the Province of  
2 Ontario.

3 Installed in the 1993 Ontario Hydro  
4 generating system in quantities sufficient to balance  
5 installations,  
6 the CANDU reactor / our CANHO MHD power plants  
7 would:

8 No. 1. Save five billion of capital  
9 cost in the generation expansion programme from  
10 1983 to 1993;

11 No. 2. Save an additional five  
12 billion dollars in energy generation costs over the  
13 30-year fuelling lifetime of the 1993 generators,  
14 for a total saving of ten billion dollars as compared  
15 to two competitive alternatives - only two choices  
16 available in Ontario Hydro. One is a mixed CANDU/  
17 coal system. That system will involve expenditures  
18 I think in excess of ten billion dollars, the system  
19 that I will present in a moment, and nineteen billion  
20 dollars saving compared to an all-CANDU system which  
21 I think is the only other reasonable alternative  
22 open to Ontario Hydro using present-day technology;

23 No. 3. Reduce to zero the oil require-  
24 ments for electricity in Ontario, thus extending  
25 Canada's oil reserves for more important uses where  
low-cost uranium fuel cannot yet be used - essentially





1 transportation and petrochemicals;

2 No. 4. Would reduce to zero the  
3 requirement for importing United States coal, thus  
4 making Ontario's electricity production dependent  
5 on only one fuel (low-cost uranium) which is under  
6 her own jurisdiction;

7 No. 5. Allow the full utilization of  
8 the capital now invested in coal-burning power plants,  
9 by adding the CANHO MHD units on top of the present  
10 coal-fired units, and fuelling this new combination  
11 with hydrogen fuel produced by electrolysis from  
12 base-load energy from CANDU reactors. Thus no  
13 radical change will be involved in changing the  
14 1983 grid into the 1993 grid because all components  
15 of the 1983 generating stations can be used although  
16 in quite a different re-configuration than is  
17 presently being considered.

18 For clarification I would like to  
19 state frankly to the Commission that in my view these  
20 proposed savings have no bearing on the Ontario Hydro  
21 1976 rate increases. The reason for that is that  
22 the CANHO technology necessary to realize such  
23 savings in the cost of producing electric power  
24 will not be available until the 1983-93 period of  
25 generation expansion.

Hence my concern here centres as does







1 yours, upon the mix of power generating stations  
2 to be installed during the 1983-1993 decade.

3 In essence I will attempt to show the  
4 Commission that in my view Ontario Hydro is caught  
5 in a difficult situation: the squeeze between the  
6 rising cost of fossil fuels (essentially coal) to  
7 power load-following stations on the one hand and  
8 on the other the initially higher capital costs to  
9 operate load-following CANDU reactors.

10 I believe that there is a way out  
11 of this apparent dilemma; there can be a third type  
12 of load-following power plant, the CANHO MHD plant  
13 which I will describe - which will have the necessarily  
14 low capital cost, and in addition, the necessarily  
15 low fuelling cost because it stores low-cost, base-  
16 load energy and passes it into the grid for load-  
17 following power purposes.

18 This CANHO MHD plant does not yet  
19 exist, but I will show the Commission that it would  
20 <sup>a</sup> save Ontario/very substantial amount of money -  
21 ten billion dollars in 1975 dollars, if it were  
22 developed and made available to Ontario Hydro to  
23 use.

24 Now let me present some of my back-  
25 ground to you in order that you will have some





1 perspective from which to judge my views.

2 I was born and educated in Saskatchewan,  
3 being trained as a nuclear physicist in 1958, so  
4 half of my life as an Easterner and half as a  
5 Westerner.

6 In 1958 I went to work for the Atomic  
7 Energy of Canada Limited at Chalk River in the office  
8 of the Senior Vice-President, Dr. W. B. Lewis who  
9 was essentially the father of the CANDU reactor in  
10 my view.

11 My functions were varied: technical  
12 secretary of working committees on CANDU fuel  
13 development, editor of proceedings of international  
14 conferences held in Chalk River on nuclear power,  
15 and other matters of that nature.

16 I became familiar with the historical  
17 development of the CANDU reactor versus the American  
18 light water reactor. The Americans were always  
19 telling us we were wrong. And I am still convinced  
20 we were right. Familiar with reactor economics  
21 in the Canadian system, the American system, in the  
22 breeder system; familiar with reactor waste disposal  
23 systems breeder reactors, and many other aspects of  
24 the nuclear power development.

25 In 1960 I resigned and went to the





1 University of Toronto, Aerospace Engineering. In  
2 1965 I went to Princeton University as visiting  
3 professor, studying there for some time at the  
4 fusion laboratory of the Atomic Energy Commission.

5 I returned to Canada later in 1965  
6 and worked at the University of Toronto, directing  
7 the Canadian Research programme in MHD power  
8 generation.

9 I resigned in 1971 to form my own  
10 engineering firm to develop MHD power generation  
11 in Canada.

12 We are holding tightly to our schedule  
13 I imagine?

14 THE CHAIRMAN: You can have about  
15 another five minutes. It depends on how much time  
16 is going to be left for questioning and clarification  
17 and so on.

18 DR. TOWNSEND: Well, let me read some  
19 of the other material here, and then just essentially  
20 present the skeleton of the argument to you.

21 THE CHAIRMAN: Yes.

22 DR. TOWNSEND: Essentially in 1983 --

23 THE CHAIRMAN: Why don't you put it  
24 up on the table there?

25 DR. TOWNSEND: Can you see now?







1                   Essentially I think Ontario Hydro is  
2 moving into what we would call, some time ago in 1950  
3 it moved out of a hydraulic phase and moved into a  
4 fossil-fired, in which case it means coal-fired and was  
5 in there for 20 years, from 1950 to 1970.

6                   Basically it is very cost effective  
7 to use nuclear reactors now rather than coal-burning  
8 power plants. I hope to show you some reasons why  
9 that is so.

10                  The kind of system which we are  
11 proposing is essentially a system where base-load  
12 CANDU reactors which are the cheapest possible  
13 energy producers in the Ontario Hydro grid will provide  
14 essentially a steady component of electric power to  
15 the grid.

16                  The consumer demand varies, and at the  
17 moment Ontario Hydro would be using coal-burning  
18 power plants to follow that varying demand of the  
19 consumer.

20                  We propose a different system, that  
21 a much larger fraction of the grid be installed as  
22 base-load CANDU reactors, and that from approximately  
23 April in the year, base-load energy be taken from that  
24 system, taken over and used to electrolyse water,  
25 changing it to hydrogen and oxygen; that those two





1 gases be stored underground in caverns, using the  
2 kind of technology that is available in Britain and  
3 in the Saskatchewan Power Corporation for the study  
4 of natural gas.

5 And then from November in the year  
6 around until April, over the winter phase when the  
7 electric peak load is very heavy because the climate  
8 is very cold up in this country, the hydrogen fuel  
9 be withdrawn from storage, burned in a high efficiency  
10 MHD generator, which pumps its heat into steam turbines  
11 and hence back into the grid. So that basically is  
12 the technical system.

13 How and why it works: basically this  
14 is a load curve (indicating); 12 months of the year  
15 plotted here versus the varying load demand on the  
16 system from the consumer.

17 I have plotted it in something called  
18 gigawatts electric, which is the international unit for  
19 a billion watts electric.

20 I have done that because it very  
21 conveniently costs about a billion dollars apiece.  
22 So the numbers balance rather nicely.

23 The annual variation is at something  
24 like a sinusoidal wave basically following the weather  
25 pattern. During January, February the demand is at





1 a peak. At a minimum during July.

2 This heavy curve here (indicating) is  
3 the time-averaged energy curve taken out of the  
4 Ontario Hydro progress report in 1973; superimposed  
5 on that average curve I have put an instantaneous  
6 spike demand on the system, so probably this year  
7 there was 12.7 egowatt demand on the system in  
8 January, and it falls to less than half of that  
9 during July. So there is a very large swing in  
10 electric power demand in Ontario, and that is  
11 basically one of the roots of the problem.

12 There is reasonable capital investment  
13 in generating stations to provide that kind of  
14 variation which our climate basically forces on  
15 the system. That is the cyclic nature of the demands  
16 put on Ontario Hydro.

17 Basically what I would like to set  
18 out for you now is what I call 1983 reference system.  
19 In 1975 it is basically pre-determined now how the  
20 system will be constructed in 1983, and hence the  
21 terms of reference of the Commission deal with  
22 the decade after 1983, to 1993.

23 Now if I could read upside down:  
24 in 1973 Ontario Hydro basically met the consumer  
25 demand with some 6,000 megawatts or 6 egowatts of  
hydro-electric. Some of it is essentially free off







1 the Niagara River, the St. Lawrence River system;  
2 some of it is from rivers further north.

3 There is 2,000 megawatts at Pickering  
4 Power sitting in here (indicating) which is the  
5 next cheapest block of electric power.

6 Something like 8,000 megawatts of  
7 coal-burning power plants installed for a total  
8 of 12.7, which the consumers put as a demand on the  
9 system.

10 Something like 3.3 were held in reserve.

11 The characteristics of load in Ontario  
12 are basically such that they grow 7% per year which  
13 means the system has to double in size every 10  
14 years. So the system in 1983 basically will have  
15 6,000 megawatts of hydro; 12,000 of nuclear; 7,000  
16 megawatts of coal and another 8,000 megawatts mixed  
17 coal in reserve in case one of the other power plants  
18 shuts down and its function has to be taken over.

19 Now the costs of doing this are basi-  
20 cally these: nuclear power at the moment, Pickering  
21 B costs about \$1,000 per kilowatt capital cost to  
22 construct. That translates into a billion dollars  
23 per gigawatt for the system we are installing  
24 here.

25 Relatively cheap fuel - natural uranium





1 to supply electricity is only one-tenth of the cost  
2 of oil to supply electricity, and operating and  
3 maintenance - I have essentially added up what is  
4 called the total present network of the system.  
5 1.8 billion dollars you would have to set aside in  
6 the pool of capital now. One billion builds  
7 the system and the other 800 million put in the  
8 bank supplies the fuel and operating costs for five  
9 years.

10 So base-load nuclear power costs 1.8  
11 billion per gigawatts.

12 Now if one had to do that same  
13 technical task with coal-burning<sup>power</sup>/plants, it would  
14 cost you 3.8 billion. That is some two billion  
15 dollars extra for coal; the primary reason that coal-  
16 burning power plants are no longer installed on the  
17 system to provide base-load electricity 80% of the  
18 hours of the year.

19 However, they are retained for a load-  
20 following load because although coal-burning power  
21 plants are essentially half as capital-intensive as  
22 nuclear reactors to install, they are more intensive  
23 fuel usage than coal, so it pays to install in a load-  
24 following load and use them approximately a third of  
25 the time during the year.





1                   The system that I described to you  
2 technically before, its economic characteristics  
3 are basically a fifth of the cost of the CANDU  
4 reactor to install, and it does a different kind of  
5 task; but very basically it is cheap to operate as  
6 well because it does not use any fuel. It is just  
7 passing through it, in a storage load, the electricity  
8 which the CANDU reactor generated.

9                   So those are the numbers that I would  
10 like you to keep in mind; 1.8 billion for your  
11 reactor over its 30-year lifetime; far too much to  
12 install coal to do the same task. Basically I would  
13 propose that the grid be re-structured not using  
14 coal load-following plants but essentially our variant  
15 here, the CANHO MHD plant can basically do the same  
16 task as the coal-burning plant at a fifth of the  
17 cost, basically independent of United States high  
18 cost coal as well.

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Belt 3  
EMT/ko

1 So translating these numbers for these  
2 three types of power plants over into the system, the  
3 1983 system, it will cost - well, there will be a 21-  
4 billion dollar investment in nuclear power plants,  
5 base-load ones, 12.6 billion in load-following coal-  
6 burning plants, and 4.8 billion investment in the  
7 reserve plants.

8 Hence that system has what I call a  
9 reference cost of 39 billion dollars attached to it.  
10 Now a certain fraction of its capital cost and a  
11 certain fraction of the fuel that you are obligated  
12 to burn in the 30-year lifetime of these power plants,  
13 so with that reference cost in mind, let me go -

14 THE CHAIRMAN: Can you finish in one  
15 minute?

16 DR. TOWNSEND: Yes. Okay.

17 There are three options, as I see it,  
18 open to Ontario Hydro for that 1983 to 1993 decade:  
19 A, B and C.

20 A is the option which would use base-  
21 load nuclear reactors plus CANHO MHD, as I have out-  
22 lined above.

23 Ten-year expansion, 1983 to 1993  
24 system, using this option has a cost of 37 billion  
25 dollars.





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Option B, which is the next most attractive, basically involves CANDU plus coal costs 10 billion more or 47 billion dollars.

If it were decided or the price of coal rose to such a high value in relation to uranium it would pay to no longer use coal on the system but all nuclear reactors, so in my opinion there is an excessive capital investment in nuclear reactors. It would take 56 billion dollars for that alternative, so I think Ontario has three choices: 37 billion, 47 billion, 56 billion, and I think I will rest there.

THE CHAIRMAN: Dr. Townsend, you have certainly given us an introduction to magneto-hydrodynamics and so on. This Commission, of course, as part of its terms of reference does include technological developments, alternative sources of energy. We normally hear of solar energy and wind energy I think particularly sometimes of tidal energy. Maybe even geothermal energy.

Perhaps we don't hear quite so much as we should of magnetohydrodynamics. This approach.

I believe since I think we will hear more about this in the future, maybe - you will probably smile at my explanation of this, but I don't think perhaps many of the audience really know much





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1 about magnetohydrodynamics. Neither do I. But I  
2 just know enough to try and get the idea across to  
3 you in about two minutes.

4 In the normal usage of fuel to create  
5 electrical energy, in this we are using hydro electric  
6 energy (that is converting potential energy, water  
7 falling, turning a wheel around) Normally in the case  
8 of all fuels, fossil fuels and nuclear fuels and so  
9 on, there is involved a conversion from the chemical  
10 energy, but this mechanical energy is created through  
11 the so-called steam cycle, and the thermodynamics of  
12 this is not very good. I mean from the basis of  
13 natural laws it is about 33% efficient.

14 So that when you take fuel and you  
15 produce steam, and then you produce motion with a  
16 steam turbine and the motion then drives the generator  
17 to create electricity, this by its very nature is an  
18 inefficient process and there is no way it can be  
19 improved unless you go to higher and higher  
20 temperatures, and the real problem sets in.

21 Now magnetohydrodynamics avoids this  
22 steam cycle part of the process.

23 It converts directly, say, from a fuel  
24 to electrical energy by - well, somewhat sophisticated  
25 technique, Stan. I mean getting hot gas flowing  
between magnetic poles, and that generates electricity







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1 just as a wire being rotated in the magnetic field  
2 does.

3 The point about it, and it is about  
4 75% efficient, so that if the chemical costs of an  
5 MHD system were really compatible, and if and MHD  
6 system or systems of appropriate sizes could be  
7 developed, then very obviously this is going to be  
8 an alternative source of electrical energy that this  
9 Commission will have to look at.

10 At the present time I believe that  
11 on the drawing board there are magnetohydrodynamics  
12 generators, and I am not talking about the hydrogen  
13 cycle part of the proposal which is the storage end  
14 which, of course, is another very quite important  
15 end. But the size at the present time on the drawing  
16 board is about 800 megawatts, and just to give you an  
17 idea Pickering is 2,000. So this is getting, I mean,  
18 in the same sort of ball park.

19 I thought since these are educational  
20 in part, these processes, that it perhaps would not  
21 be out of place of I tried to put across some of the  
22 fundamentals of MHD. I suppose I wasn't far off the  
23 mark was I, Stan?

24 DR. TOWNSEND: Very close.

25 THE CHAIRMAN: Thank you very much.

Bob, have you any questions?





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DR. ROSEHART: I think Dr. Townsend at some other time will be able to talk in more detail about the technical aspects. Maybe a philosophical technical question: I guess you are in the area of what I would term frontier technology, and I think one of the comments in the scientific community in Canada is it is very difficult to take an idea through to the prototype and production stage.

I presume you have had discussions with various utilities and probably the Atomic Energy of Canada Limited.

How have you been received in such a technical discussion?

DR. TOWNSEND: Generally I have found that they are more preoccupied with their present-day problems. To a certain extent looking further down the road, not as much as I would like to see them look.

MHD technology has to be developed in large sizes in power plants, admittedly to go into utility. That really is happening only in the Soviet Union at the present moment.

To be frank I must admit that the economic argument of finding out and completing an analysis which I have just done recently so far as Ontario is concerned, it would save 10 billion dollars





3.6 1 within the system. That analysis was completed after  
2 talking with the utilities and the governments.

3 I have apprized variously I think BC  
4 Hydro, Manitoba Hydro, Saskatchewan Power Corporation,  
5 basically Ontario Hydro - all of the Canadian utilities,  
6 a few provincial governments, one federal government.

7 One of the reasons we are in some of  
8 the difficulties that we are in today with respect to  
9 energy is that the policy planners have not taken the  
10 long range view they should have set in motion ten  
11 years ago.

12 The kind of programs that they should  
13 have, which is why I think this particular program is  
14 a very important one to consider today, <sup>has</sup> a very high  
15 cost benefit ratio.

16 I worked out, if the Commission is  
17 interested what the cost effectiveness of the CANDU  
18 program was. What did it cost the taxpayers  
19 federally? One to two billion dollars in my esti-  
20 mation.

21 What did it say the Ontario Hydro  
22 Electric consumer? 64 million dollars by my calcu-  
23 lations. An extremely cost effective program. The  
24 one I have outlined here would take 100 to 200  
25 million dollars to develop, which seems to me a  
reasonably small cost in view of the potential 10







3.7 1 billion dollar return.

2 I think there is a very good case for  
3 studying the technology in detail, and I think I will  
4 still camp on the door of the governments.

5 THE CHAIRMAN: Thank you very much,  
6 Dr. Townsend. It is good to see a young Canadian  
7 with such forward looking ideas, and I am sure we all  
8 wish you good luck in your endeavours. Thank you  
9 very much.

10 Is Mr. Martin present? Good. Mr.  
11 Martin who is representing himself.

12 P. S. MARTIN

13 MR. MARTIN: I would like to address  
14 the Commission on a private presentation, and I would  
15 stress that I represent no one other than myself.

16 I would like to bring before the  
17 Commission the topic of Ontario Hydro's participation  
18 in uranium exploration programs. Specifically, the  
19 programs announced to date are joint ventures with  
20 Shell and Northern Ontario and Amok in Saskatchewan.  
21 I have given the Commission an outline of my text,  
22 and of course I included some press cuttings with it.  
23 They are all from the Globe and Mail in the last three  
24 months.

25 Whilst recognizing that Ontario Hydro  
needs to secure supplies of fuel for the future, I





1 personally question whether Hydro should be involved  
2 in exploration. Exploration of this type is basically  
3 risk-oriented, and no amount of money spent in this  
4 phase of mineral development can guarantee success.  
5 By that I imply securing future supplies of uranium  
6 at commercial prices is Ontario's objective.

7 If we are to ensure supplies of fuel,  
8 it is up to the Federal or Provincial Governments to  
9 legislate for adequate supplies to be set aside for  
10 the Canadian people. In the case of uranium I believe  
11 the people of Ontario are entitled to say to their  
12 representatives in Queen's Park, "make sure we have  
13 adequate uranium before allowing any further exports".

14 If the supplies can be secured through  
15 legislation, it alleviates the need for Hydro to try  
16 to buy back our needed energy resources at some future  
17 date.

18 The precedents are established I  
19 believe:

20 (1) In the early 60's the U.S.  
21 Government encouraged domestic exploration for uranium  
22 at the expense of Ontario producers at Elliot Lake;

23 (2) Australian discoveries of uranium  
24 have effectively been nationalized by the government  
25 in that by refusing permission to develop known  
deposits until Australia has a domestic need for the





1 uranium, they have avoided the premature production  
2 and exporting of the uranium and hence saved it for  
3 the Australian people's uses;

4 (3) The current moratorium on  
5 Albertan coal developments is to my mind as much in  
6 the interests of buying time to evaluate Alberta's  
7 own future energy requirements as it is to protect  
8 the environment.

9 In all these cases the governments  
10 have acted in the best interests of the local people:  
11 in some instances it has rather failed to act (and  
12 thereby delay) in order to achieve the same objective.

13 These are not isolated cases where  
14 governments have acted in the best interest of their  
15 peoples, but they are the most relevant to my presen-  
16 tation. They suggest to me that as far as uranium  
17 exploration is concerned in Ontario, the Provincial  
18 Government should be securing some share of future  
19 uranium production for the people of the province  
20 rather than Ontario Hydro having to buy a stake  
21 through exploration.

22 THE CHAIRMAN: Thank you very much,  
23 Mr. Martin.

24 DR. STEVENSON: Mr. Martin, you seem  
25 to attach some significance to the distinction between







1 Ontario Hydro using the resources that it achieves by  
2 charging us for electricity and also credit of the  
3 province in borrowing funds entering into the uranium  
4 export business and the Provincial Government which  
5 would use our tax dollars and provincial credit pre-  
6 sumably to do the same thing?

7 MR. MARTIN: No, I'm sorry, I am  
8 afraid there is a distinction there. I believe  
9 basically the resources are ours, and that I suggest  
10 legislation rather than tax dollars to secure the  
11 future supplies of uranium.

12 If the uranium is there, and we are  
13 told that it is there, a certain amount of it should  
14 be set aside by legislation for the people of the  
15 province before we enter into any future long term  
16 exporting commitments.

17 DR. STEVENSON: I see. So you are not  
18 suggesting then any sort of more direct provincial  
19 involvement in the search and exploration of uranium  
20 resources?

21 MR. MARTIN: Over and above establishing  
22 the climate in which exploration is profitable to the  
23 people in the business of exploring for it.

24 I believe that there is distinction  
25 between generating fuel - I'm sorry, I believe there  
is a distinction between the business of generating





1 fuel for energy from fuels already established and  
2 going out and searching for those fuels.

3 I think the precedent in the case of  
4 Ontario Hydro currently negotiating with Albertan  
5 coal producers is one that should be favoured in  
6 terms of uranium production.

7 DR. STEVENSON: One last question,  
8 Mr. Martin: is uranium not a rather unique resource  
9 in the sense that the Federal Government has the  
10 larger say in its rate of development than with any  
11 other provincial resource such as coal or gas or  
12 oil? Does that not complicate the situation and make  
13 it rather difficult for Ontario to establish policies  
14 as to export?

15 MR. MARTIN: I think there is a  
16 certain amount of truth in what you say, but I think  
17 we are seeing the lumping together of energy sources,  
18 and that after the Federal and Provincial matter, I  
19 think the steps which Alberta has taken with its own  
20 sources of energy in terms of oil, gas and coal,  
21 could be followed here in Ontario by the government  
22 with respect to our own sources of energy which is  
23 uranium.

24 DR. STEVENSON: Thank you, Mr. Martin.

25 MR. SCOTT: Mr. Martin, you distinguish  
between exploration per se and development per se.





1 MR. MARTIN: Yes, I do.

2 MR. SCOTT: What are your feelings  
3 about the development for Ontario Hydro as opposed to  
4 exploration?

5 MR. MARTIN: I believe that each case  
6 must be looked upon on its own merits. I believe  
7 exploration is something that is basically risk-  
8 oriented all the way down the line. And once the  
9 deposits have been initially identified, then is the  
10 time for Ontario Hydro or perhaps the Government to  
11 take an active part.

12 Just having uranium in the ground  
13 doesn't necessarily mean that it is commercially  
14 produceable, and current costs of developing a mine  
15 and building the infrastructure run in the order of  
16 200 to 300 million dollars per project.

17 Without government approval and govern-  
18 ment funding in many instances these projects can't  
19 go ahead, but as far as exploration goes we can see  
20 the frittering away I believe of hundreds of millions  
21 of dollars all over the place.

22 I believe, and I noticed in a press  
23 cutting there is reference to Ontario Hydro looking  
24 at potentially upwards of thirty of these exploration  
25 programs, so that this could be just the tip of  
the iceberg.







1 I am not criticizing Ontario Hydro for  
2 going into this thing. One of the back-up sheets does  
3 suggest they are almost forced into this by the lack  
4 of action on the legislative scale.

5 I believe now is the time in this  
6 forum to question and to look hard at who is going  
7 to actually go into the exploration and how to secure  
8 these supplies in future.

9 MR. SCOTT: One last question: are  
10 you familiar with the provisions of the Atomic Energy  
11 Control Act?

12 MR. MARTIN: No, I am not.

13 MR. SCOTT: Thank you, Mr. Martin.

14 THE CHAIRMAN: Thank you, Mr. Martin.  
15 You have raised a rather unique issue as far as this  
16 Commission is concerned. Thank you very much for  
17 raising it.

18 MR. MARTIN: Thank you very much  
19 indeed for giving me the time to appear here.

20 THE CHAIRMAN: I think perhaps we  
21 have time for one more submission before we have a  
22 short coffee break.

23 . . . .

24 BRUCE PRENTICE

25 THE CHAIRMAN: Welcome.





1 DR. STEVENSON: We might say "welcome  
2 neighbour" since you are on the sixth floor and we  
3 are on the seventh.

4 MR. PRENTICE: We have a small  
5 advantage; we are the landlord.

6 DR. STEVENSON: We had better listen  
7 to what he says!

8 MR. PRENTICE: Mr. Chairman and  
9 Commissioners, thank you very much for the opportunity  
10 to present a submission on behalf of the customers of  
11 Toronto Hydro.

12 As the largest single customer of  
13 Ontario Hydro, we believe that the facts, explanations  
14 and opinions we are presenting are important and of  
15 interest to members of this Royal Commission.

16 While we might under normal circum-  
17 stances consider the time allowed inappropriate, in  
18 fact we appreciate the reasoning behind and applaud  
19 the principle of the time constraints imposed by this  
20 Commission. On this understanding, I have attempted  
21 to tailor my remarks accordingly.

22 In the interests of brevity, I will not  
23 dwell on the sixty-five year history of Toronto Hydro,  
24 nor our legal and working relationship with Ontario  
25 Hydro. All this has been covered in legislation,  
published books, reports and briefs to various Boards





1 and Commissions which, I am sure, are available to  
2 the members of this Commission. Also, I do not intend  
3 to explore in any detail the essential aspect of  
4 reliable electric supply in sufficient quantity to  
5 meet the needs of an urban area such as the City of  
6 Toronto. I hope it will suffice to make a rough  
7 analogy between the machinery of a complex industrial  
8 process and the services required by an urban  
9 community.

10 In the machine process, if the power  
11 is cut off to any part, the whole process is adversely  
12 affected. In the urban community, the same statement  
13 might be applied. The entire operation is a  
14 continuous process which relies on the action and  
15 inter-action of the various parts. The analogy  
16 breaks down, of course, with the obvious difference  
17 that the machine process is designed to produce an  
18 end product. The services to an urban community are  
19 designed for people, so that they may work and live  
20 comfortably and safely in that community.

21 I am sure the essentiality of reliable  
22 electric service to an urban community is obvious to  
23 each member of the Commission. Public transit, both  
24 surface and sub-surface, hospitals, schools, pumping  
25 stations, sewage treatment plants, transportation,  
heating and ventilating in sealed high-rise buildings --







1 all and more are completely dependent on the reli-  
2 ability of the electric service available. More,  
3 the effective operation of any urban community depends  
4 upon the unquestioned conviction of its residents that  
5 all these essential services are and will be  
6 continuously available.

7 At this time, I will not comment in  
8 detail on the priority problems which are before this  
9 Commission, that is, the need for a north channel  
10 generating station or the 500 K.V. transmission lines,  
11 except to point out to the members of the Commission  
12 that:

- 13 - Any delays in the in-service dates of  
14 these facilities adversely affect the  
15 capacity and the reliability of the  
16 Ontario Hydro system which, in turn,  
17 will have an adverse effect on the  
18 reliability of the supply to the City  
19 of Toronto;
- 20 - Any increase in costs to Ontario Hydro  
21 as a result of delays in putting these  
22 facilities in operation will have to  
23 be shared in part by the electric  
24 customers of Toronto Hydro;
- 25 - Any additional costs incurred as a  
result of delays are substantial, may





1 be categorized as unproductive and,  
2 therefore, very inflationary.

3 In view of the current problems and  
4 Government attitudes towards inflation, and the  
5 concern of the people of this Province on this subject,  
6 this latter point - inflation - must surely be given  
7 careful consideration, and not dismissed as merely  
8 a hypothetical argument.

9 With your indulgence, and again in the  
10 interests of brevity, I would forego any attempt at  
11 an acceptable literary style and present some facts  
12 and opinions in point form for your consideration.

13 FACTS

14 (1) The City of Toronto, which we serve,  
15 has had a relatively static population and fixed  
16 area for forty-five years. A change made in 1967 to  
17 municipal boundaries such that we became responsible  
18 for the supply of power to the former villages of  
19 Forest Hill and Swansea, was by and large counter-  
20 balanced by the transfer of the supply to the Town  
21 of Leaside from Toronto Hydro to East York Hydro.

22 The attached graph (Appendix A) shows  
23 a smooth and increasing peak load growth, and a  
24 relatively smooth and increasing growth in the energy  
25 sold in this area. In view of the relatively constant  
area and population, members of the Commission will





1 find this remarkable in the light of obvious changing  
2 situations such as the depression years of the thirties  
3 and World War II.

4 Just so that I don't mislead the  
5 Commission, in 1974 the peak load shows that has  
6 flattened off in December, 1974, it was one of the  
7 warmest Decembers in a quarter of a century. In fact  
8 our June load of this year was 6% higher.

9 I think the Commission should also be  
10 aware of other, perhaps not so evident, changes. In  
11 the decade 1955 to 1965 there was a substantial  
12 exodus of factory load from the City of Toronto to  
13 other areas. With some time lag, there was a  
14 substantial growth in the commercial load. Then too,  
15 there was a change in the character of the load, from  
16 what might be termed a light-sensitive load to a  
17 temperature-sensitive load.

18 (2) During the past quarter century, in  
19 addition to the growth in electrical energy consumed,  
20 there has been a substantial increase in the energy  
21 input to this area in the form of natural gas. Exact  
22 figures are not available to me, but Consumers' Gas  
23 send-out in 1974 was more than three times the gas  
24 send-out in 1965. In the early 1970's, Consumers'  
25 Gas had an annual growth rate of the order of 15%.

(3) The pattern of change which we have







1 seen in the City of Toronto and the accompanying  
2 growth in energy use is not unique. I am sure  
3 members of the Commission are aware of the redevelop-  
4 ment that has and is taking place in the core areas  
5 of Ottawa, Hamilton, London and other urban areas.

6 (4) In 1970, the City of Toronto  
7 commissioned an in-depth study concerning district  
8 heating and air pollution which included the energy  
9 needs and patterns within the City boundaries, and  
10 in particular within the central core area. As a  
11 result of this study, a report was presented to and  
12 approved in principle by City Council in 1974, which  
13 states in part:

14 "Installing electric heating  
15 in all new buildings in the inner  
16 tracts would actually progressively  
17 reduce air pollution from heating  
18 sources, whereas all other choices  
19 would almost inevitably lead to a  
20 progressive increase in air pollution  
21 with growth. The chimney problems  
22 would also disappear, to the aesthetic  
23 benefit of the City. It is a con-  
24 clusion of the study that a maximum  
25 long-term benefit would be realized  
by moving toward the objective of an





1 electrically heated city, with priority  
2 given to this objective in the inner  
3 tracts area. It is, therefore, sug-  
4 gested that:

5 "(A) Electric heating be made  
6 mandatory for all new buildings or  
7 new additions to existing buildings  
8 within the inner tracts exceeding  
9 50,000 square feet of gross floor area.

10 "(B) A system of incentive  
11 bonus payments or tax concessions be  
12 developed to encourage electric  
13 heating of all new buildings and  
14 additions of any size throughout the  
15 City.

16 "(C) A system of incentives  
17 be developed to encourage a preference  
18 for heat pump systems over electric  
19 resistance heating.

20 "(D) A system of incentives  
21 be developed to encourage conversion  
22 of existing systems to electric heat-  
23 ing provided that the building heat  
24 conservation standards are made equal  
25 to those stipulated for new buildings."

(5) A developer today is able to construct





1 a complex within four years from the time of approval  
2 to the time of total occupancy, with an electrical  
3 load larger than that of the community of Lindsay or  
4 Collingwood. In today's climate, Ontario Hydro might  
5 take three times as long to provide capacity for that  
6 load if additional transmission or switching capacity  
7 is required.

8 OPINION

9 From an examination of the historical  
10 change in energy required for a constant population  
11 and area such as the City of Toronto, taking into  
12 account the apparent shortage of impending shortage  
13 of availability of fossil fuels, and making some  
14 allowance for conversion to electrical energy for end  
15 use, and making some allowance for the apparent  
16 continuing population growth policy of the Canadian  
17 Government, I am convinced that the historical long-  
18 term growth percentage for Ontario Hydro of 7% may be  
19 much too low for the decade 1982-1993. The consequences  
20 of planning based on too high a load growth expectation  
21 can be easily rectified by delaying projects, and with  
22 little additional cost involved. The consequences of  
23 planning new facilities based on too low a growth  
24 figure might well be catastrophic.

25 In addition to the load growth patterns  
which I have commented on, and which are of concern to







1 this Commission, I would like to comment on the  
2 planning and review mechanism which has been stated  
3 as also of concern to this Commission.

4 Because the way of life of the people  
5 of this Province is going to be greatly affected -

6 (1) by the ability or inability of  
7 Ontario Hydro to meet the needs for  
8 electrical power for industry, which  
9 provides employment, and for operation  
10 of the essential services which make  
11 community living possible,

12 (2) by the tremendous amounts of money  
13 required to achieve the necessary  
14 expansion of plant,

15 (3) by the impact on the environment of  
16 generating stations and transmission  
17 lines -

18 some type of review of future plans is desirable to  
19 provide necessary reassurance to the people of this  
20 Province.

21 However, such a review is not without  
22 cost; and not just dollar-out-of-pocket costs, but  
23 essential manpower costs. The effect of these latter  
24 costs may well be crippling.

25 Ontario Hydro has provided for the  
electrical needs of this Province for sixty-five years





1 in such a way as to receive praise from inside and  
2 outside the country, and to serve as a model for other  
3 power companies the world over. At the same time,  
4 Ontario Hydro has grown to be one of the largest  
5 corporations in Canada and, so it appears to most  
6 people, a large and impersonal corporation. But any  
7 organization is only as good as the people who make  
8 it go. Ontario Hydro has been very successful in  
9 employing very competent and dedicated people. This  
10 is a major factor in the success of the operation.

11 The numerous hearings on matters Hydro  
12 in recent years and the preparation of detailed sub-  
13 missions, has diverted much of the time and effort  
14 of many, many key people from the work they were  
15 trained to do and are skilled in doing, to the less  
16 familiar and discouraging task of explaining the  
17 operation, usually in lay terms.

18 The result has been a slowing down  
19 of essential work and frustration of key people.

20 The costs are high and probably  
21 incalculable.

22 There is another disadvantage to a  
23 review process which could prove very costly.

24 Ontario Hydro has been responsible for  
25 and accountable for, providing electrical energy as  
and when required. In my opinion, the decisions or





1 recommendations emanating from any review process  
2 could have the effect of reducing the accountability  
3 of Ontario Hydro. This creates a weakness with great  
4 and obvious hindrance to the success of the operation.  
5 I hope this Commission will bear this in mind.

6 Mr. Chairman and Members of this  
7 Commission, thank you for listening to me this after-  
8 noon. There is much, much more to be said and I am  
9 sure, will be said. With that in mind, and with the  
10 indulgence of the Commission, I would like to reserve  
11 the right to make further submissions to the  
12 Commission, if it appears necessary or advantageous  
13 to the electrical customers of this City. By the  
14 same token, if we, at Toronto Hydro, can provide any  
15 information or data which the Commission would find  
16 useful, we would be pleased to make it available.

17 All of which is respectfully submitted,  
18 Mr. Chairman.

19 THE CHAIRMAN: Thank you very much,  
20 Mr. Prentice. I certainly hope in the future we will  
21 have many opportunities to hear from you. We recognize  
22 your centrality in the whole operation of Ontario  
23 Hydro, and it was good of you to come in with such a  
24 comprehensive submission at this time.

25 Bill, would you have some points?

DR. STEVENSON: Just one, Mr. Prentice.







1 I am very interested in your views as a long time  
2 member of the electrical establishment, I think it is  
3 fair to call you, in Ontario, as to the effects of  
4 public participation on your business.

5 I think you probably would admit that  
6 there is not going to be a lot that people in your  
7 position and senior officials in Hydro can do about  
8 public participation. As one of those engaged in the  
9 process myself I want to keep my eye on the costs,  
10 and I want to hear from people in your position as to  
11 what it is doing to the business of providing  
12 electrical power.

13 We hear from Ontario Hydro in, for  
14 example, their submission to us that anyone who is  
15 interested in can look at - can obtain it from Ontario  
16 Hydro - I will just quote you what they say, that  
17 Ontario Hydro welcomes a critical examination of its  
18 current planning criteria to ensure that the planning  
19 principles and concepts to be used by it in expanding  
20 the system in the future will accord with the views  
21 of the people whom Ontario Hydro seeks to serve, and  
22 they go on a bit in this vein.

23 Now I guess you could argue that this  
24 is just politeness, but I would like to think that  
25 maybe Ontario Hydro does think that a Commission like  
this will be in some way able to determine the public





1 attitude on certain questions that the experts at Hydro  
2 would otherwise have to make for themselves as to  
3 trade-offs between the types of generation, safety  
4 factor, land use and so on.

5 Do you think there is anything in that  
6 point and in this position that at least I hold just  
7 starting out on this exercise?

8 MR. PRENTICE: Oh, there is a lot in  
9 your view. I think the problem that arises, as you  
10 said, you want to talk to the top people. Everybody  
11 wants to talk to the top people. The top people are  
12 pretty busy, and you don't have a vast number of  
13 people with long experience and ability in any  
14 organization. They are busy doing the work of the  
15 organization. This is the problem. You have  
16 advantages and merits of hearings, certainly, but the  
17 costs are high too.

18 DR. STEVENSON: Thank you, Mr.  
19 Prentice.

20 MR. COSTELLO: Has your load factor  
21 been going down through this period in the last ten  
22 years or so?

23 MR. PRENTICE: No, going up.

24 MR. COSTELLO: Very much?

25 MR. PRENTICE: We have always had -  
well, from 1930 we have had a fairly high load factor,





1 so the improvement, if that is the word, has not been  
2 phenomenal.

3 MR. COSTELLO: But it is still high?

4 MR. PRENTICE: Yes.

5 MR. COSTELLO: Your 1970 study, would  
6 you still come to the conclusion today looking at the  
7 relevant prices of oil and what we are looking at now  
8 in terms of electric power?

9 MR. PRENTICE: Yes. As a matter of  
10 fact in Toronto we are not getting new homes in sub-  
11 divisions. We are getting many renovated homes and  
12 old homes being torn down and replaced with sort of  
13 townhouses.

14 These are nearly all going all-electric  
15 heating, and most new apartment buildings are all-  
16 electric heating.

17 MR. COSTELLO: Metered or un-metered?

18 MR. PRENTICE: Bulk metered.

19 MME. PLOURDE-GAGNON: In your field  
20 you are dealing with the ordinary consumer. Do you  
21 have feedback to the other person, to the ordinary  
22 consumer that you serve?

23 MR. PRENTICE: Personally you mean?

24 MME. PLOURDE-GAGNON: I mean Toronto  
25 Hydro.

MR. PRENTICE: Toronto Hydro, we have.







1 MME. PLOURDE-GAGNON: You talk about  
2 the top, you know.

3 MR. PRENTICE: Yes.

4 MME. PLOURDE-GAGNON: A few minutes  
5 ago.

6 MR. PRENTICE: Yes. I guess we have  
7 about one thousand employees, and there is about one  
8 hundred of them who are dealing with the public all  
9 day long every day. This is their business.

10 MME. PLOURDE-GAGNON: What is your  
11 reaction?

12 MR. PRENTICE: We get very prompt  
13 feedback from our customers through these people if  
14 things are not going right or if they are going right  
15 - we don't hear so much about things going well, but  
16 we certainly hear promptly when they are not going  
17 well.

18 DR. ROSEHART: Just one question: in  
19 the Metropolitan Toronto area, in the residential and  
20 commercial sectors, would it be fair to say you are  
21 in competition with natural gas for heating in houses  
22 and buildings?

23 MR. PRENTICE: I think we certainly  
24 were in competition with natural gas up until this  
25 point in time. I am not sure what the position of  
natural gas is at the moment, whether they are looking





1 for business or looking to get rid of business. I  
2 don't know.

3 MR. SCOTT: Mr. Prentice, on the  
4 assumption that due to recent Federal policies the  
5 wholesale price of gas in Toronto has gone up from  
6 about 90¢ to \$1.25. I wonder if you have looked at  
7 the future competition position of Ontario Hydro vis-  
8 a-vis natural gas, and in this I am assuming that gas  
9 will be available.

10 MR. PRENTICE: We haven't looked at  
11 the competition position. Frankly we don't know at  
12 the moment what is going to happen to our energy costs  
13 by next year. We don't know what is going to happen  
14 to the natural gas costs for next year.

15 Also there has been a lot of adverse  
16 public feeling about advertising by people in the  
17 hydro end of the business, so we don't go looking for  
18 business. We only deal with what comes in the door  
19 and back to people on that basis, so in a sense we are  
20 not out competing in the hard marketplace any more.

21 MR. SCOTT: Now you may or may not be  
22 filing a further submission I take it.

23 MR. PRENTICE: That is right.

24 MR. SCOTT: But I gather from some-  
25 thing you said to the Chairman you would have no  
problem about coming back at some convenient time to





1 be examined further on the submission you have already  
2 made.

3 MR. PRENTICE: No problem at all.

4 MR. SCOTT: Thank you.

5 THE CHAIRMAN: Thank you. Thank you  
6 very much indeed, Mr. Prentice.

7 At this time we will break for coffee  
8 and we will reconvene perhaps just two or three  
9 minutes before four o'clock.

10 . . . .

11 --- Short recess  
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---On resuming.

THE CHAIRMAN: Mr. White, North York Hydro. Glad you could come.

D.K. WHITE (NORTH YORK HYDRO)

MR. WHITE: Thank you, Mr. Chairman.

Mr. Chairman and members of the Commission I would like to commence by telling you I had some pre-knowledge of the presentation to be made by Mr. Prentice. I would like to tell you that I concur in every bit of it.

Mr. Chairman and members of the Commission, at North York Hydro it is my duty to ensure that the electrical energy needs of 550,000 people and assorted business and industry are supplied both now and in the future. Some estimates by our planners indicate we shall have to cater to the needs of 700,000 people but a few years hence. The work of this Commission will have considerable impact on my ability to ensure their electric supply.

I do not envy the job charged to this Commission and I congratulate the members for accepting the challenge. In my view the odds of your being losers are pretty big. You will be chastized if you overestimate the needs of Ontario's citizens for electric power, and I prophesy you will be damned





1 if you underestimate them. My inclinations, if I  
2 were in your position would be to lean towards  
3 the overestimate. Engineers and constructors  
4 can decelerate building programs, but there are  
5 finite limits to the degree of speed-up they can  
6 accomplish. In fact any speed-up at all in the  
7 present in the construction of a power system in  
8 our province today looks well nigh if not entirely  
9 impossible.

10 I think, Mr. Chairman, that over-  
11 relying on historical data in estimating future  
12 electric energy needs could be very dangerous.  
13 Having regard for the "Energy Crisis" I have a  
14 strong conviction that the use of electricity will  
15 expand and probably should expand. I believe  
16 electricity will be needed to replace other energies  
17 already in such short supply - in such short supply  
18 that rationing and other controls are contemplated.  
19 As well, I envisage some of the fossil fuels being  
20 diverted to more essential usages than their present  
21 ones.

22 Mr. Chairman, I used the term "should  
23 expand" a moment ago, and I would like to explain why.  
24 Future supplies of electricity for Ontario must,  
25 it seems to me, be predominantly nuclear. Nuclear  
sources are the only energy sources indigenous to





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1 Ontario and not subject to control and pricing by  
2 others predominantly not Canadians. The development  
3 of a strong nuclear fired electric system could well  
4 be economically advantageous in serving as a competitor  
5 for and price anchor on other energies. A strong  
6 nuclear system I think implies the "power centre"  
7 concept put forward by Ontario Hydro in its report  
8 556 last year.

9 Mr. Chairman, my principal purpose  
10 in coming before you is to outline for you from my  
11 experience how serious I believe the 550 people we  
12 serve at North York Hydro need an assured electric  
13 supply.

14 I would like to speak for a moment  
15 and congratulate the Dean of Engineering, University  
16 of Toronto, for making representation on behalf  
17 of one of them last night. It was very kind of him  
18 to speak of the lady in Willowdale who wanted the  
19 light to go on when she flipped the switch!

20 They do not have available to them the  
21 alternatives that rural folk can, if they must, adopt.  
22 Our citizens cannot cut and burn wood to keep them  
23 warm. Of necessity they live and work in high rise  
24 buildings where even ingress and exit are dependent  
25 on electric supply. Some of those buildings must be







4-4 1 evacuated if electric supply fails for an extended  
2 period. Our citizens need electricity to travel  
3 to and from their work and indeed even employment  
4 is most often dependent on it. I hope, Mr. Chairman,  
5 that you will hear from industry how electric power  
6 will be needed if industry is to provide employment  
7 for our growing population.

8 Then there are as well, Mr. Chairman,  
9 some groups in our society whose needs are more  
10 critical than others. I have in mind, for example,  
11 people in hospital and senior citizens who have  
12 special difficulties if power supply fails. My  
13 worry, Mr. Chairman, is that the great silent  
14 majority will not be telling you how badly they need  
15 electricity. I worry, Mr. Chairman, whether they  
16 even appreciate their growing need.

17 In nearly 30 years direct involvement  
18 with electric distribution at a retail level I cannot  
19 ever recall a customer asking for service to be  
20 discontinued except for a very short time or if he  
21 were moving. But, Commissioners, I assure you I  
22 have heard very quickly and clearly from any whose  
23 service had been interrupted.

24 My recollections cover the span of the  
25 late 40's when electricity was in shortage and we had  
to interrupt supply. Believe me, were we to have to





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1 go through that again I would sure consider early  
2 retirement; and I am afraid it might even be forced  
3 upon me. In my view it would be a first order  
4 disaster were we to have a recurrence.

5 To digress one moment from my urban  
6 experiences, during those shortages of the 40's I  
7 was involved in rural electric distribution and  
8 acquired some appreciation for the inconvenience  
9 they caused our farm population. I judge the  
10 inconvenience would be multiplied to very serious  
11 proportion were we to have regular interruptions to  
12 farm service now.

13 I do worry a bit when I hear sweeping  
14 statements about vast amounts of land taken out of  
15 production for transmission lines. Certainly they do  
16 use some productive land. On the other hand one of  
17 the surest ways to keep land in a productive condition  
18 might well be to build a transmission line over it.

19 But not only does Ontario Hydro need  
20 the nuclear electric generating stations, it needs  
21 the transmission system to deliver the energy. The  
22 delay in the building of the Bruce lines has been  
23 of such concern to us at North York Hydro that  
24 we have expressed it to the Minister of Energy.  
25 Mr. Timbrell recently said the delay will cost Ontario  
citizens \$13 million. We believe he was in error and





4-6 1 the cost will be several times that figure - a cost  
2 to all the citizens, businesses and industry in our  
3 province. Some closely related problems, Mr. Chairman,  
4 fortunately or unfortunately, would up in your  
5 Terms of Reference. ~~We hope~~ you will be able to deal  
6 with them successfully and quickly.

7 At North York Hydro we think there will  
8 be a major shift to electricity for space heating.  
9 Indeed we have experienced the situation recently  
10 where the developer of a very large project changed  
11 his designs to electric even after construction was  
12 well advanced. Increasing numbers of our citizens  
13 expressed interest in converting their homes to electric  
14 heat. They are confused now because they hear so  
15 much about increased costs of electricity and so  
16 little about the equally escalating costs of oil and  
17 natural gas.

18 We worry however, Mr. Chairman, because  
19 we know that if for some reason home supply of natural  
20 gas or heating oil should be discontinued so also would  
21 be electric supply because we simply could not  
22 cope with the demands which would develop.

23 At the municipal level we have no  
24 control over such shifts - nor do I think we would  
25 wish control. However, we are required by statute  
to supply the loads presented to us. One of the







4-7 1 factors which bothers us greatly is the fact that  
2 electricity has been for many years and continues  
3 arbitrarily underpriced. We think this condition  
4 must be quickly corrected, Mr. Chairman, the  
5 deliberations of this Commission may be futile  
6 because wasteful use will continue and grow.

7 We have encouraged and will continue  
8 to encourage the highest practical standards of  
9 thermal insulation. In that respect I suggest the  
10 electric utility industry has demonstrated leadership  
11 and responsibility by developing and promoting high  
12 insulation standards. Competing energy suppliers have  
13 only recently adopted a parallel position. We would  
14 support stringent insulation standards for all heated  
15 structures.

16 A little over a year ago at North York  
17 Hydro we commenced an advertising programme to persuade  
18 our customers to shift electric usage away from the peak  
19 load hours. There is not sure evidence yet that the  
20 programme is successful but we believe if it can be  
21 made successful, there are both short and long term  
22 benefits for North York and all Ontario citizens.

23 There is another item of work we  
24 have been attempting that I would like to mention -  
25 even though it has not produced either quantitative





1 or even qualitative answers. We would like and have  
2 tried to put a cost to society on energy we fail  
3 to deliver. We accept that in the average home  
4 the cost is just inconvenience but we have a strong  
5 conviction that in business and industry the cost  
6 is very large. I dearly wish we could have produced  
7 some measure to place before you today.

8 Mr. Chairman, I apologize to the  
9 Commission. I did not recognize from the advertising  
10 and news releases that written presentations were  
11 expected this early. Other pressures precluded  
12 me from having the time and energy to do a better  
13 job before you today. I hope, sir, that should I  
14 have further ideas or thoughts concerning your work  
15 that I could be able to present them to you.

16 I thank you for the opportunity of  
17 appearing before you.

18 As well, Mr. Chairman, I offer my  
19 services in any capacity that you might think I  
20 can contribute to your work. Thank you very much.

21 THE CHAIRMAN: Thank you, Mr. White.  
22 I can re-assure you that on the part of the Commission  
23 you produced a very excellent submission, and I  
24 hope in the future you will be producing even more  
25 submissions of such excellence when we move into the





1 main Inquiry sometime the middle of next year.

2 We are sorry for the delay in getting  
3 out notices of these meetings and the short time that  
4 was available to people to draw up their submissions,  
5 but that, as you probably gathered by now, we had  
6 hoped that these were going to be fairly informal  
7 sessions with the major purpose of identifying the  
8 issues which we will discuss in depth subsequently,  
9 so I don't think you need worry at all about this  
10 submission which has been very well prepared.

11 MR. WHITE: Thank you very much.

12 MADAME PLOURDE-GAGNON: Mr. White,  
13 you talk about the silent majority. Which category of  
14 people represent the silent majority in Ontario in  
15 the matter of the electric power?

16 MR. WHITE: Nearly everybody.

17 MADAME PLOURDE-GAGNON: And do you have  
18 any success to get their participation?

19 MR. WHITE: I wish I had a con-  
20 structive suggestion for you, ma'am. I am afraid  
21 I don't.

22 DR. STEVENSON: It is somewhat a  
23 question of definition, Mr. White; someone said there  
24 is no point in going after the silent majority, by  
25 definition.







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MR. WHITE: By definition!

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DR. STEVENSON: I have a question for you, sir. I am very intrigued by the comment you made about your attempts to encourage customers to shift their usage away from peak hours.

Can you describe how it is done, and does it incorporate any use of peak rates?

MR. WHITE: I used the term "advertising program" specifically. That is the only attempt - that is the only area in which we have attempted as yet.

THE CHAIRMAN: Mr. White, would you mind speaking just a little bit more closer to the mike?

MR. WHITE: We have only advertised, Dr. Stevenson. We have not introduced special rates for the purpose.

DR. STEVENSON: I see. The other question, Mr. White: I have read that there is a unique experiment going on in your utility to meter utility consumption using the telephone lines remotely in a sample of houses. Am I correct? And could you give us a progress report?

MR. WHITE: Yes. There is a program. It has been a joint program. It involved the Consumers'





1 Gas Company, the Water Department of the Borough of  
2 North York, North York Hydro and the key element was  
3 the cooperation of the Bell Telephone Company.

4 By feeding in certain information and  
5 by especially equipping the meters in the customers'  
6 houses, we were able and have been able to success-  
7 fully read gas, water and telephone or gas, water  
8 and electric meters in a sample of 100 houses.

9 I think the technology is proven. We  
10 don't have any handle yet on what the costs may be.

11 DR. STEVENSON: Can you give us any  
12 idea of when we might expect some sort of interim  
13 report?

14 MR. WHITE: We were hoping we would  
15 have some measure - at least a ball park measure  
16 of costs by now. I suspect that it will be after the  
17 new year, and perhaps on into spring.

18 DR. STEVENSON: Thank you very much.

19 DR. ROSEHART: On page 4 you mentioned  
20 the question of interruptions, interruptible service,  
21 in an attempt to get at the so-called silent  
22 majority. The Commission is using a public attitude  
23 survey, and there are several questions in there  
24 regarding quality of service and length of outages,  
25 and outages of one minute, ten minutes, et cetera.





1 Very preliminary results seem to  
2 indicate that the public would put up with an outage  
3 every once in awhile of, say, 30 seconds or one  
4 minute.

5 In your experience in the utility  
6 business do you think the majority of people would  
7 accept that quality of service?

8 MR. WHITE: Telephones ring an awful  
9 lot quicker than that.

10 DR. ROSEHART: They do ring quicker  
11 than that.

12 MR. WHITE: I think, as I suggested in  
13 my brief, that residential customers could tolerate  
14 less quality of service than most get. But I worry  
15 greatly about industry and commerce. I dearly wish  
16 we could have had some measure of cost of service not  
17 supplied, the cost to customers.

18 MR. McCAGUEY: Mr. White, as you are  
19 probably familiar there is a paper in the kit dealing  
20 with funding of interest groups or individuals.

21 Now the Commission has been charged  
22 with introducing a funding program which would be  
23 used to assist individuals or interest groups while  
24 in research of issues or presentation or preparation  
25 of material. And my question is this: at a meeting







4-13 1 in London we heard from a group that originated I  
2 think with the University of Western Ontario, but  
3 has in its membership quite a number of rural people  
4 surrounding London. And they, I believe, are setting  
5 about together on a cooperative basis to research  
6 certain issues that are of common interest to rural  
7 and urban.

8 Do you not believe that there is a good  
9 deal to be said for such an effort so that there is  
10 a better understanding develops between rural and  
11 urban because rural people are fighting to hold good  
12 land in production, to provide food for the consumer,  
13 so that really our total interests are rather close,  
14 are they not?

15 MR. WHITE: Mr. Chairman or Mr. McCague,  
16 in my view the production of food is probably one of  
17 the highest priorities that we should have in our  
18 society today, and certainly I do not condone the  
19 taking out of production of good farmland.

20 I suspect that there is a lack of  
21 appreciation on the part of urbanites of the problems  
22 and of the needs to keep the farmland in production.  
23  
24  
25





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1 MR. MCCAGUE: You mentioned the 1940's,  
2 and agriculture and the situation today. Certainly  
3 the milk producer and poultry producer and many,  
4 many others - well, an operation with 100,000  
5 broilers that just arrived in, if the power fails  
6 that 100,000 broilers would be dead very shortly.  
7 So that their needs are very, very closely tied  
8 to hydro and their appreciation of electric power  
9 is almost without measure.  
10

11 MR. WHITE: I am very sure of that,  
12 sir.  
13

14 MR. SCOTT: Sir, I wonder if you  
15 could tell me do you agree with Mr. Prentice's  
16 remarks in response to Dr. Stevenson on the costs  
17 of public participation. He didn't really answer the  
18 question very directly, but he said that senior  
19 people are very busy, and presumably in the public  
20 participation process would make them even more busy.  
21

22 MR. WHITE: Yes, I believe I agree -  
23 yes, I do agree with Mr. Prentice.

24 MR. SCOTT: Now, as a utility manager  
25 do you think we should accept these costs? In other  
26 words, are they necessary or desirable to achieve a  
27 reasonable degree of public participation, or do you  
28 think there should be less public participation?  
29

30 MR. WHITE: I would like to see us be





1       able to accomplish it quicker and more efficiently.

2                   MR. MCCAGUE:   If I might, Mr.  
3       Chairman?   Mr. White, we are hopeful that there will  
4       be a good deal of joining of groups with respect to  
5       a given issue, and that many of the items that will  
6       be researched by interest groups and will be financed  
7       in part will be a saving to the Commission because  
8       those issues will not necessarily be followed up by  
9       the Commission if they are being researched  
10      satisfactorily by interest groups.   So that some of  
11      this money cannot be regarded as an expense by any  
12      means.

13                  MR. WHITE:    Well, Mr. McCague, perhaps  
14      you misinterpreted me.   Certainly we have to have  
15      these research programs.   I just have the feeling  
16      that we are missing some opportunities that might  
17      otherwise be - that we might have been able to take  
18      advantage of; that kind of thing, sir.

19                  MR. SCOTT:   Sir, are you familiar with  
20      the federal policies as they have been applied to  
21      Ontario Hydro with relationship to the price that  
22      Ontario Hydro might want to pay for uranium?   You  
23      refer to this matter on page 2 of your submission.

24                  MR. WHITE:   No, I am not familiar.

25                  MR. SCOTT:   Are you familiar with  
federal policies as to whether or not the federal







5-3

1 government wishes to see world prices available to  
2 Canadian uranium producers? Do you know anything  
3 about that?

4 MR. WHITE: No, I don't.

5 MR. SCOTT: Now one last thing: at  
6 the bottom of page 6 of your prepared statement you  
7 indicate, and I quote:

8 "We would like and are trying  
9 to put a cost to society on energy we  
10 fail to deliver."

11 Can you tell me, please, whether your  
12 attempts have been reduced to writing in any kind of  
13 draft study or paper or memorandum?

14 MR. WHITE: We have some replies to  
15 questionnaires that we put out - particularly  
16 commercial and industrial customers asking them to  
17 tell us whether a 10-minute interruption or half-hour  
18 interruption or an hour interruption - could they put  
19 a cost on it; put a quantitative value on it, or  
20 could they put a qualitative value on it.

21 Most of the replies came back that we  
22 got and we got a fairly reasonable response I think  
23 from a selected group of customers - most of the  
24 replies came back with rather indefinite answers.

25 We were not able to reach any  
conclusions from the replies that we got. We are





5-4 1       endeavouring to evolve another system, and have  
2       recently instituted a program of quick follow-up  
3       with industry and commerce after we suffer a power  
4       interruption.

5               We are hopeful that the people with  
6       the incident fresh in mind will be able to give us  
7       some measures.

8               MR. SCOTT: Well now in relation to  
9       your past experience have you collated or gathered  
10      together the answers from the questionnaires in  
11      memorandum form?

12              MR. WHITE: I can't recall. I would  
13      like to check for you if I could?

14              MR. SCOTT: All right. Now with  
15      regard to the new system that you say you are  
16      instituting of quick follow-ups, are you going to  
17      keep written records on the responses you get?

18              MR. WHITE: We sure are.

19              MR. SCOTT: Would they be available to  
20      this Commission under proper circumstances?

21              MR. WHITE: I would think so, sir.

22              MR. SCOTT: One last thing: page 5  
23      you indicate that there will be a major shift to  
24      electricity for space heating. I did not have the  
25      advantage of seeing your paper before today, and I am  
      wondering if at some convenient time you would be





1 prepared to return to be examined further on this  
2 question of whether or not there will be a shift to  
3 electricity?

4 MR. WHITE: Certainly.

5 MR. SCOTT: Thank you.

6 THE CHAIRMAN: We have enjoyed having  
7 you with us.

8 FROM THE FLOOR: Would you entertain  
9 comments from the floor or questions?

10 THE CHAIRMAN: Not at this time, for  
11 obvious reasons, you know we would never get through  
12 the submissions that have been written.

13 May I, before asking Mr. Binning - is  
14 Mr. Binning here? Good - just mention that the  
15 information sheet in the kit, this very short  
16 questionnaire, we hope as many of you as possible will  
17 fill it in. It is a question of you being put on a  
18 priority mailing list, and if we have this information  
19 then you will be kept informed of the activities of  
20 the Commission as time goes on. So I hope you will  
21 please fill it in and leave it at the back of the hall.

22 Mr. Binning?

23 BRUCE W. BINNING

24 MR. BINNING: We are not completely  
25 sure that we should be here this afternoon. Our  
concern is strictly labour relations in the







-6 1 construction industry, and that is the context in  
2 which we come here.

3 Now the general contractors' section  
4 of the Toronto Construction Association represents in  
5 labour relations about 1,200 employers who are both  
6 general contractors and subcontractors. Now we have  
7 been concerned for some time that Ontario Hydro  
8 construction has greatly adversely affected labour  
9 relations in the construction industry. And when you  
10 talk about planning for the future, we have no  
11 submissions as to the requirements of Hydro, but we  
12 know that Hydro will expand; will engage in extensive  
13 construction, and we are very concerned with the  
14 effect of that construction of labour relations, not  
15 only in the Toronto area but in the whole Province of  
16 Ontario.

17 Now we have not had an opportunity to  
18 really formulate any suggestions. Our concern is  
19 that we believe that within your terms of reference  
20 the question of planning for labour relations should  
21 be included when you talk about future expansion of  
22 hydro facilities.

23 Now we for some time have thought that  
24 perhaps Ontario Hydro, if in the public interest it  
25 requires continuous construction activity without  
strikes, legal strikes or legal lock-outs, that





5-7

1 perhaps Ontario Hydro should be removed from the  
2 current labour legislation in the Province, and  
3 should be subject to separate legislation. So that  
4 what Ontario Hydro does in construction does not  
5 adversely affect the remaining part of the  
6 construction that is not Hydro.

7 I can tell you without a shadow of  
8 doubt, for example, that the patterns and the terms  
9 and conditions of employment utilized by Hydro on  
10 the St. Lawrence Seaway are still having an effect on  
11 labour relations in the Kingston area. And what it  
12 did do in Kingston was it created artificial wage  
13 rates that were too high, and which were imposed on  
14 that area for, as I say, even now which I guess is  
15 about 20 years later, and in our submission as you  
16 look to the future you must look at the effect of  
17 Hydro construction on labour relations in the  
18 construction industry. And that is really totally  
19 our concern and reason for coming here.

20 THE CHAIRMAN: Thank you, Mr. Binning.

21 You will be interested to know that  
22 this question was raised during our meetings in  
23 Sudbury; in particular by a group from Manitoulin  
24 Island. I believe this matter is relevant to the  
25 Commission, but I would like to ask Robin Scott  
perhaps to express an opinion. He was not present





8  
1 during our Sudbury meetings. So this is the first  
2 time the question has been raised and he has been  
3 present, so I think this is a good opportunity for him  
4 to express an opinion.

5 MR. SCOTT: Well, thank you, Dr. Porter.  
6 I am sorry to let you down, sir, but I can't express  
7 an opinion at the present time. But perhaps with some  
8 questions for clarification to Mr. Binning I may be  
9 able to, if I might have your indulgence for a moment.

10 Mr. Binning, have you examined the  
11 formal terms of reference of the Commission?

12 MR. BINNING: Yes, I have.

13 MR. SCOTT: Have you an opinion one  
14 way or another whether or not the questions you raise  
15 are implicitly included in any of the terms of  
16 reference, or not, or whether the terms of reference  
17 should be or required to be amended to include them?

18 MR. BINNING: Well, if I am looking  
19 at the correct sheet, that four-numbered paragraph -

20 THE CHAIRMAN: That is right.

21 MR. BINNING: I would suggest it would  
22 fall within paragraph 3 at least, and possibly  
23 paragraph 2.

24 MR. SCOTT: And briefly why, sir?

25 MR. BINNING: Because in our submission  
the future plan will adversely affect labour relations









-9 1 outside of the construction itself, and therefore has  
2 an effect on the public, if I might use that term,  
3 that would be similar to other effects like environment,  
4 like farmland and this type of thing. It has an  
5 economic effect that I believe you must look at and  
6 must deal with.

7 MR. SCOTT: Mr. Binning, the Commission  
8 did not require it. I wonder if you have by any chance  
9 sent a copy of your letter to Hydro?

10 MR. BINNING: I only found out about  
11 these hearings yesterday, and the letter was dictated  
12 this morning and I brought 20 copies with me.

13 MR. SCOTT: Of course at this stage  
14 we are unable to control whatever answer Hydro might  
15 make to your letter, but I am sure that it will be of  
16 great benefit to the Commission to have Hydro's  
17 response. So would you have any particular objection  
18 if we asked Hydro to speak to this matter and comment  
19 on your letter?

20 MR. BINNING: None whatsoever.

21 MR. SCOTT: I think if that were done,  
22 if they chose to take advantage of that opportunity, I  
23 would see that a copy of their response is sent to you.

24 MR. BINNING: I would like an  
25 opportunity to make a reply to any submissions they make  
in that regard.





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MR. SCOTT: Thank you.

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MR. COSTELLO: Mr. Binning, I understand what you are getting at all right, but doesn't this problem involve any large multi-million dollar construction project? Is it peculiar only to Hydro?

MR. BINNING: Yes. In many respects because Hydro, as it were, reserved a position that there will be no strikes on a Hydro project for a period, say, of 10 years.

MR. COSTELLO: Did they sign an agreement to that effect?

12

MR. BINNING: Yes.

13

MR. COSTELLO: I was not aware of that.

14

15

16

17

MR. BINNING: The agreement is this document. That it pick up local terms and conditions. Let me give you a quick illustration. I know you are busy.

18

19

MR. COSTELLO: I am not. I am somewhat experienced in this area and -

20

21

22

23

24

25

MR. BINNING: Let me quote a figure to you. I believe at the Pickering project this year at one point were employing 65% of all the plumbers in the Toronto area, and the plumbers were in a strike position, so you can appreciate if one plumber's union goes on strike with 60% already working at Pickering, that has a tremendous effect on those





5-11

1 negotiations and the length of the strike.

2 This is our concern, and this happens  
3 time and time again in place after place, wherever  
4 Hydro comes in to a large construction project.

5 MR. COSTELLO: And there have in fact  
6 been no strikes?

7 MR. BINNING: Not on the Hydro projects,  
8 that is correct. The only strikes have been illegal  
9 and they have been short.

10 MR. COSTELLO: I see.

11 MR. SCOTT: So the basis of your  
12 concern, Mr. Binning, is the fallout because of Hydro's  
13 construction practices and their programs? It is  
14 the fallout on the rest of the industry?

15 MR. BINNING: That is right. But it  
16 is not only the fallout but it is the establishment  
17 of patterns that are difficult to break once the  
18 tradesmen leave the Hydro project or the employer, for  
19 that matter, leave the Hydro project.

20 MR. SCOTT: I think you referred to  
21 this introducing higher wage scales than was otherwise  
22 paid locally?

23 MR. BINNING: No, it is not that so  
24 much because Hydro pick up the conditions that are  
25 negotiated locally, but they also impose other  
conditions. Just for example, they require certain







1 jurisdiction to be assigned to certain unions even  
2 though those unions don't do that particular work in  
3 the rest of the construction industry within the  
4 Province. And it does create chaos.

5 There is almost never a day goes by  
6 that we don't have some problem to answer on a Hydro  
7 project that is different from the rest of the  
8 industry in our law firms.

9 MR. SCOTT: All right. Now if the  
10 Commission concludes the matters you raise are  
11 properly within its terms of reference, I take it  
12 you have no objection to coming back at some  
13 convenient time and speaking to them again?

14 MR. BINNING: We would ask for an  
15 opportunity to come back, and we would like to make  
16 a broader preparation and make a broader submission.

17 MR. McCAGUE: You were referring to  
18 the St. Lawrence project some 20 years back?

19 MR. BINNING: Yes.

20 MR. McCAGUE: Have you had discussions  
21 with any organization in connection with that? That  
22 is a long time ago. Has there been consultation on  
23 the subject you are raising now in the intervening  
24 period?

25 MR. BINNING: It has been raised in  
several rounds of negotiations where I have participated





=13 1 in negotiation with various trade unions who were  
2 affected, and it is really a situation where the  
7/ 3 damage has already been done and you can't correct it.  
4 And that is why I am making a submission here.

5 If it is carefully planned and  
6 certain restrictions are imposed on Hydro in carrying  
7 out their construction projects, then you can avoid  
8 the damage being done. We can't do anything once the  
9 damage is done, and these higher rates and different  
10 conditions, once they are established are very  
11 difficult to negotiate out of there, and this has  
12 been our problem.

13 MR. MCCAGUE: Like any efforts you  
14 have made to have these cleared up in the last 20 to  
15 25 years have failed apparently?

16 MR. BINNING: No, they are correcting  
17 themselves, but very slowly. The cost has been very  
18 substantial to the private sector and to private  
19 construction.

20 THE CHAIRMAN: Thank you very much.

21 -----

22 THE CHAIRMAN: Is Mr. Magyar present?  
23 Welcome.

24 W. B. MAGYAR, P.Eng. MBA.  
25 (President of Technical  
Economists Limited)

MR. MAGYAR: Mr. Chairman, members of





14 1 the Commission, I am here today as a private citizen  
2 and a person who has been around a lot of the Province,  
3 particularly the northern part of the Province, and my  
4 background, I am a mining engineer, and the reason I  
5 am interested here is the observation I have in  
6 many properties, that when we need power we look for  
7 the closest stream and river system to give us even  
8 small slugs of power.

9 Now in the light of what has been  
10 happening to us in the past year particularly, with  
11 coal, oil, gas, all escalating in price, I wonder  
12 whether we have reached a time when we should once  
13 again look towards the harnessing of small installations  
14 providing local supplementary power wherever the  
15 streams are, be they near our existing citizen towns  
16 in Southern Ontario or in the northern areas.

17 Now the benefit that I see here is  
18 that admittedly the cost of installing small power  
19 plants is relatively high from the standpoint of the  
20 unit fixed capital expense, but the on-going operating  
21 expenses are very, very nominal, and I think that it is  
22 far more advantageous to use money locally than it is  
23 to keep on paying very high prices for foreign-based  
24 energy sources.

25 Now whether we have reached the time  
to date that it pays us to go ahead with small







5-15

1 installations I don't know, and I am merely suggesting  
2 that as part of your interest in this matter of long-  
3 term planning for power for the Province, I hope that  
4 you will give thought to the inclusion of such  
5 economic analyses at this point in time for the purpose  
6 of determining the conditions under which we might go  
7 ahead and build small power plants.

8 Now the other side of this coin is  
9 another one where I think over the past 20 years we  
10 have forgotten to think small. I think that a lot of  
11 our attention has been directed to these enormous  
12 multi-million kilowatt-hour installations, and I  
13 wonder whether our data base today is sufficient to  
14 start thinking small again.

15 In other words, just where are those  
16 sites that can be considered imminently or within the  
17 next 25 years? And this means that we need a twofold  
18 thrust here.

19 One is to examine the economics of  
20 small installations, and secondly to re-discover just  
21 where those sites might be.

22 Many admittedly will be in built-up  
23 areas, and for people reasons they may not be  
24 considered, but I wonder just what our untapped  
25 capacity is.

Earlier one of our previous speakers,





16  
1 he raised the question of just what does it cost us  
2 not to deliver power, and in a like manner I would  
3 ask you just what does it cost us to not harness  
4 these things that are nearby that might collectively  
5 save an enormous incremental unit that could  
6 conceivably be in the order of hundreds of thousands  
7 of megawatts.

8 So that is the first part of the  
9 message that I wish to relate to you: to consider  
10 looking at small installations as sources of  
11 supplementary power. Now in the inventory taking  
12 that I suggest, we might uncover other analogous  
13 situations. The one that I wish to raise is a very  
14 daring one perhaps; something akin to tapping Lake  
15 Simcoe as a source of Hydro power for Metropolitan  
16 Toronto. There is a 470-foot head, roughly a 32-mile  
17 distance between us, and I wonder if it is not  
18 possible (certainly we are able engineering-wise to  
19 do so) but should we not think of driving a tunnel  
20 into that lake and use that head to provide the next  
21 big slug of power that this community needs?

22 Now once again we did not have time to  
23 elaborate on financial details, estimates. This all  
24 happened very, very quickly, and I am delighted that  
25 at least I can spring the ideas on you. But I do hope  
you consider that.





7  
1 The third item that I wish to raise  
2 takes us back into Northwestern Ontario. We have four  
3 major river systems there that are relative untapped,  
4 these being the Severn, Winisk, Attawapiskat and  
5 Albany. There must be an enormous amount of power  
6 remaining to be developed up there.

7 Now whether our people in the Hydro  
8 and in the Province know the potential I really don't  
9 know. I would not be surprised if they have not  
10 ascertained that. I feel that we have sort of  
11 relegated Hydro power into a second-class status, and  
12 this is why I wish to point to that area again.

13 And the other twist that I encourage  
14 you to consider is instead of harnessing that power to  
15 export it into the industrialized areas, let's keep  
16 the power up there, develop it, and use it as a means  
17 to populate and develop our relatively forgotten  
18 Northwestern Ontario region.

19 It is a different approach, but  
20 certainly one that might be considered and one that is  
21 worth thinking about when we think about long-term  
22 needs.

23 In conclusion, the recommendations that  
24 I advocate are four simple ones:

25 One, is to explore the ramifications  
of these three simple concepts that I have just







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1 suggested; particularly their financial side upon the  
2 provincial budget, the consumers in the Province, and  
3 upon Ontario Hydro which is the medium for distributing  
4 it largely.

8/  
5 Secondly, I urge you to compile an  
6 inventory and description of all undeveloped and  
7 partly developed Hydro Electric Power sites throughout  
8 the Province for the purpose of identifying those upon  
9 which something can be done now or in the reasonably  
10 near future. I believe we should rank these in terms  
11 of interest and the costs of developing them.

12 Thirdly, to analyze the critical  
13 variables associated with the provision of supplementary  
14 power via small hydro installations, and I am suggesting  
15 the range from 3 megawatts to 200 megawatts.

16 These would all be very small plants,  
17 but in my travels through the Yukon and Northern Quebec  
18 we do have many 4 to 5 megawatt installations that are  
19 providing good power, reasonably high cost for those  
20 areas, but when there is no other cheap alternative it  
21 is not a dear price to pay.

22 And finally, to undertake cost  
23 benefit analyses for several potential situations that  
24 we might embark upon, and, hopefully, if the economics  
25 and preliminary look-see is attractive, then let's  
consider embarking on a systematic construction program





19  
1 to develop all of these sites. We do need construction  
2 activity, and I think such an undertaking would keep  
3 the money at least within our provincial boundaries.

4 Thank you very much.

5 THE CHAIRMAN: Thank you very much,  
6 Mr. Magyar.

7 I would just like to raise one point:  
8 your suggestion, No. 2, relating to the use of Lake  
9 Simcoe and this 470-foot head potentially there -

10 MR. MAGYAR: Right.

11 THE CHAIRMAN: What is the sort of  
12 level of power supposing this was economically and  
13 technologically feasible? What order of magnitude  
14 would you think it would be?

15 MR. MAGYAR: Dr. Porter, I don't know.  
16 It is a number that I am in the process of developing,  
17 and it takes a little bit of homework to ascertain  
18 that.

19 THE CHAIRMAN: Yes.

20 MR. MAGYAR: I have been working on  
21 that concept for a while, and we just haven't completed  
22 that assessment. But I would suspect it would be in  
23 the hundreds of thousands.

24 THE CHAIRMAN: Hundreds of thousands?

25 MR. MAGYAR: Kilowatts.





1 THE CHAIRMAN: Kilowatts, yes.

2 DR. STEVENSON: Mr. Magyar, we are  
3 looking, as you know, at the system planning for  
4 electric power over the period 1983-1993 and beyond.

5 MR. MAGYAR: Yes.

6 DR. STEVENSON: Last year in the  
7 spring the Energy Board was looking at the program  
8 for 1977-82, and the question was raised, you know,  
9 why all these nuclear power stations, Hydro, what  
10 about the untapped hydro potential? So Hydro filed  
11 a sheet listing what they considered to be, I think  
12 in rank order, 20 or 30 potential hydraulic  
13 developments in Ontario.

14 This is available. You can get it  
15 either by contacting the Commission librarian, our  
16 Commission, or by Ontario Hydro where they might, for  
17 all I know, have a more up-to-date list. But they  
18 are evidently keeping an eye on hydraulic potentials  
19 in Ontario. The last hydraulic units developed were  
20 on the Madawaska River.

21 MR. MAGYAR: Right.

22 DR. STEVENSON: And what with  
23 escalation mostly enforcing the figures worked out to  
24 well over \$1,000 a kilowatt, and I am looking around  
25 for support from the Hydro people here (I think that  
is right), it was terribly expensive power.







21 1 I don't know whether that was the  
2 most attractive hydro alternative, but I fear that  
3 the comment you make that this may be expensive is  
4 probably correct. Nevertheless I am interested, as  
5 you are, in what the situation is now with coal in  
6 the \$30 to \$40 a ton range.

7 How does this shift the economics of Hydro?  
8 Obviously it improves it, but how much? I share  
9 your interest.

10 MR. MAGYAR: Yes. The only comment I  
11 would add there is that \$1,000 a kilowatt-hour today  
12 in terms of what is happening because of inflation  
13 and all is perhaps not as staggering a number as is  
14 the realization that the unit price of gas or coal is  
15 going to be up in the prohibited realms, and we do  
16 have to look at the two sides of the coin.

17 One is the immediate capital cost  
18 which I argue in the case of Hydro stays within our  
19 economy; circulated with the cash flow just keeps  
20 going in amongst us.

21 When we look at the on-going operating  
22 costs we now have to take a very hard look at just how  
23 many dollars we care to export of high-price energy  
24 sources and I don't think anybody has yet balanced the  
25 expected future costs against the much higher capital  
costs for hydro today. And somewhere I believe there





is a break-even point that I am hoping we discover.

DR. STEVENSON: Thank you very much.

MR. COSTELLO: Putting stations on the Albany, the Severn, et cetera, what would you do with the power up there? What use would you put it to? You have to have a raw material of some kind or other to process.

MR. MAGYAR: Well, I believe the power itself is the inducement, and everywhere that we go with industrialization the order of priority is to have a supply of power, and once that is established, industry follows.

MR. COSTELLO: Well, I come from the wood products industry. There isn't much wood up - the trees get smaller the further north you go.

MR. MAGYAR: Yes.

MR. COSTELLO: I guess you look at mining. I am not familiar with undeveloped mining.

MR. MAGYAR: We haven't really looked at all the mining up there, and one of the reasons is that it is too remote, and in the course of proceeding with a Hydro development we automatically build roads into the area, bring people into it and we start exploring it and at this point in time one might be putting the cart before the horse in trying to prove that there is a source of business up there. I prefer to be a little daring on these issues and provide the basic ingredient that is the cause of attraction of industrialization.





1 MR. COSTELLO: To go back in history,  
2 the Abitibi mill at Iroquois Falls was founded because  
3 there was water there and because there was wood.

4 MR. MAGYAR: Yes.

5 MR. COSTELLO: I just have one other  
6 point to make, and that is Hydro are operating some  
7 other hydraulic stations to get more capacity. The  
8 Canyon station, I just happened to notice last night,  
9 is being upgraded by other new wheels, another 38  
10 megawatts which is another 20%.

11 MR. MAGYAR: Right.

12 MR. SCOTT: Mr. Magyar, I wonder if  
13 you have thought of the difficulties, if any, that  
14 might be encountered with constructing a trench for  
15 the diversion from Lake Simcoe to Lake Ontario having  
16 regard to some of the difficulties that Ontario Hydro  
17 encounters in constructing transmission lines of that  
18 length? Have you thought about that at all?

19 MR. MAGYAR: Oh, yes. I am not talking  
20 of a trench. I am talking of a tunnel. The height  
21 of land is such that we would have to be way under that  
22 lake to get hold of that power. We would have to go  
23 overland.

24 MR. SCOTT: Now today I heard a  
25 similar point to your point about the development of  
small stations being expressed by one of the members







1 of the Legislature, Mr. Reid. But his point was not  
2 that Ontario Hydro should do it but that conditions  
3 should be such that small hydro electric facilities,  
4 where available, should be able to be developed by  
5 private industry.

6  
7 Were you thinking of private industry  
8 or were you thinking more on incorporating within  
9 the Ontario Hydro system?

10 MR. MAGYAR: Well, I am easy on that.  
11 Where a small community, a town, say an electrical  
12 utility system of a town takes on construction of  
13 a venture like that - I am easy. Some industrial  
14 users now are doing it on their own. I don't think  
15 the issue is how we do it; it is just that we  
16 <sup>doing</sup>  
17 consider/so and perhaps salvage as much of this  
18 conveniently available power as we can.

19 MR. SCOTT: Thank you.

20 THE CHAIRMAN: Thank you very much,  
21 Mr. Magyar.

22 I am sure your submission will receive  
23 due consideration. You have raised issues of great  
24 interest, and that is what the whole object of these  
25 preliminary public hearings is in aid of.

26 -----

27  
28 THE CHAIRMAN: The next submission on  
29 my list is that of CELA, the Canadian Environmental  
30 Law Association, being presented by Dolores Montgomery.





5  
1 It is a rather major submission, rather lengthy. I  
2 am wondering, Dolores, whether it would be just as  
3 convenient for you to start this evening. There are  
4 two others that could be quite short. Now it is  
5 absolutely up to you. It is just as you wish. If  
6 you would like to be the first on at 8 o'clock or  
7 just after 8 this evening, or whether you would like  
8 to go ahead now.

9 MISS MONTGOMERY: I am sorry, Dr.  
10 Porter, but my time does not permit me to go on this  
11 evening.

12 THE CHAIRMAN: Okay. You have  
13 answered the question.

14 MR. SCOTT: There are two gentlemen  
15 who wish to make submissions. I think all they wish  
16 to do is file the document and identify themselves.  
17 I wonder if we could perhaps, if Miss Montgomery  
18 wouldn't mind, if we take them now?

19 THE CHAIRMAN: Yes.

20 MR. SCOTT: Mr. Gray, I believe.

21 JAMES ROSS GRAY

22 MR. GRAY: Thank you, Dr. Porter.

23 My names is James Ross Gray. This is  
24 a presentation on my own behalf, private citizen, but  
25 I should give a little further identification.

I am a Director and former President





1 of the Pointe au Baril Highlanders Association and  
2 Director of the Georgian Bay Association, and Chairman  
3 of their Committee on the District of Parry Sound  
4 Local Government Study.

5 I am a member of the Minister of  
6 Natural Resources Special Purposes Advisory Committee on  
7 the Eastern Shore of Georgian Bay.

8 Now I am here not representing any  
9 of those bodies. I am here on my own behalf. And my  
10 concern is with the development on Georgian Bay, and  
11 more particularly, the high priority ones in the  
12 north channel and particularly with reference to the  
13 proposed development, at least the site which is being  
14 considered on Great LaCloche.

15 THE CHAIRMAN: Thank you very much.

16 - - - -

17  
18 THE CHAIRMAN: The other I believe is  
19 Mr. Huston.

20 MISS MONTGOMERY: I believe he has  
21 left.

22 THE CHAIRMAN: All right. Dolores,  
23 it is all yours.

24 DR. STEVENSON: Mr. Chairman, just a  
25 comment in response to the gentleman that a few minutes







1 asked if he could ask any questions. I am sure you  
2 meant to invite him back tonight when opportunity will  
3 be given at some length to one and all, and I certainly  
4 hope you will return tonight at 8 o'clock.

5 THE CHAIRMAN: Yes. Of course.

6 CANADIAN ENVIRONMENTAL LAW ASSOCIATION  
7 (DOLORES MONTGOMERY)

8 MISS MONTGOMERY: Firstly, the  
9 Canadian Environmental Law Association wants to thank  
10 the Commission for the opportunity of presenting this  
11 brief to them. We also want to thank the Commission  
12 for providing the expense money necessary to hold a  
13 conference of public interest groups last October 4th  
14 and 5th. Many of the ideas which we are presenting  
15 in public today are a result of the fruitful  
16 conversations and exchange of ideas we had at that  
17 conference.

18 Firstly, I think we should explain  
19 why we are here on the day which the public  
20 participation organizer from the Commission assured us  
21 was reserved for business. We feel that the  
22 separation of business and public interest groups is an  
23 artificial one; business concerns are concerns of the  
24 public. CELA is and has always considered itself a  
25 the friend of/business community. Last Spring, when we  
conducted a public education campaign on the





1 environmental impact assessment legislation, we found  
2 common environmental and business interests over and  
3 over again. We both wanted a clear statement of the  
4 rules under which future operations could be conducted.  
5 Both CELA and the business sector did not want  
6 environmental concerns to become such an emotional  
7 issue that it would stop all progress, but on the  
8 other hand, both business and CELA felt that more  
9 attention must be paid to environmental quality and  
10 long range planning for the preservation of the  
11 environment for our children.

12 This is why we chose to appear today.  
13 As I have listened to the briefs from the business  
14 community, it has confirmed my view that many of CELA  
15 and business' interests are often common and many of  
16 them are so substantially similar that we can look  
17 forward to mutual understanding during the inquiry the  
18 Royal Commission will conduct into electrical power  
19 planning for Ontario's future.

20 The rest of this brief is divided into  
21 three parts. They are research in the areas of both  
22 science and law, funding for participants in the  
23 Commission's main hearings and public participation.

24 Research: It is widely agreed that  
25 some independent research work will have to be done





9  
1 outside of Ontario Hydro and outside of the Royal  
2 Commission before the Commissioners will be able to  
3 make recommendations following their terms of  
4 reference.

5 A first prerequisite for independent  
6 research is obtaining information as to what is already  
7 available. To this end, CELA urges the Commission to  
8 insist that Ontario Hydro provide a list of and  
9 access to all information, documents, books, tapes,  
10 films, or computer stored information which Ontario  
11 has touching the matters into which the Commission is  
12 inquiring. Ontario Hydro should also be asked to  
13 update this list every month during the Commission's  
14 existence and to provide a list of proposed  
15 information gathering projects so that there will not  
16 be unnecessary duplication of effort.

17 At the general province-wide level,  
18 independent research should be conducted at least into  
19 the following areas. These were all areas of interest  
20 which were suggested by the public interest groups.

21 Analysis of Current Expansion Forecast:

- 22 . Cost of capital and debt/equity  
23 relationships.  
24 . Rate structures  
25 . Siting of transmission lines and  
generating stations







- . Energetics
- . Location of generating stations to exports, i.e. Ontario, Michigan, New York, grid
- . Industrial growth patterns - direct per capita use
- . Fuel prices
- . Incremental growth rate
- . Reliability factors.
- . Historical factors
- . Public education
- . Implications for an overall Ontario land use plan

#### Socio Economic Impact of Expanding Electrical Power Supplies

The suggestions for study were:

- . Relationship to provincial/national economy
- . Implications of current and increased growth rates
- . Impact on food producing lands
- . Impact on rural communities
- . Population migration to primary energy installation
- . Commercial and industrial growth
- . Decentralized small scale vs. centralized large scale "parks"





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- . Effects of generation away from  
load - food supply - community  
employment
- . Effects on North of generation for  
remote load.

Rate Structures and Energy Conservation:

The public interest groups felt that  
research needed to be done on -

- . Demand and rate structure
- . Peak load pricing
- . Inverted rate structure
- . Lifeline rate structure

Environmental Impact Assessment:

People felt that environmental impact  
assessment should be done on -

- . Climatic impacts
- . Pollution impacts including: ozone,  
thermal, radiation and health hazards
- . Reliability capacity including  
accidents and sabotage
- . Decreased reliability with increased  
transmission voltage.
- . Impacts on recreational lands
- . Impacts on food producing lands
- . Health hazards to workers such as  
uranium miners





- 1 . Impact comparison of generating site  
2 in Southern Ontario versus Northern  
3 Ontario

4 Alternatives to Non-Renewable Resources:

5 It was felt necessary to study  
6 performance of non-renewable resources. The assumptions  
7 were -

- 8 1. Change in use  
9 2. Alternate sources  
10 3. Alternate rate structures  
11 4. Growth vs. zero energy growth (ZEG)

12 It was necessary to study alternate  
13 sources:

- 14 1. Waste heat  
15 2. Wind  
16 3. Hydrogen  
17 4. Sun or solar power  
18 5. Fuel cell

19 Potential of Zero Energy Growth via Renewable Resources  
20 Effects on:

- 21 . Capital requirements  
22 . Rate structures  
23 . Energetics ratios as relates to  
24 environmental impacts of current  
25 rate of growth

In addition to those tasks, the







1 participants felt it necessary to study Ontario Hydro  
2 as a corporate entity under the following headings.

- 3 . Process of public accountability
- 4 . Financing and accounting procedures
- 5 . Its mandate to growth and decision-  
6 making process
- 7 . Access to information
- 8 . Its legal corporate parameters

9 With respect to local concerns, the  
10 Commission has been hearing a great deal about these  
11 in its travels around the province. I realize that  
12 the process is not finished and the scope of concerns  
13 expressed to the Commission will be even broader than  
14 what CELA wishes to mention today.

15 CELA, for its part, has only had  
16 feedback from the Commission's preliminary meetings  
17 from its own members where the Commission has held  
18 meetings. From the concerns and thoughts expressed by  
19 the local members, it is clear that the single most  
20 important research requirement with respect to a local  
21 concern is the necessity for an independent  
22 environmental impact assessment of the nuclear power  
23 project which is scheduled for the North Channel. I  
24 realize that there will be separate priority project  
25 hearings and this is one of them, but I want to





1 emphasize that before such priority project hearings  
2 begin, an independent full scale proper, thorough,  
3 environmental impact assessment must be done, not only  
4 on the three sites selected, but on the question of  
5 nuclear power, its effects and most particularly, the  
6 storage of radioactive wastes. It would definitely  
7 be a case of putting the cart before the horse if  
8 a site were selected before an evaluation of what was  
9 to go there was made.

10 Research - Legal:

11 Again, with respect to research into  
12 the law affecting energy in Ontario, there should be  
13 some independent research but information that the  
14 Commission has had produced, either by its own  
15 counsel or by other outside lawyers, should be made  
16 readily available to everyone participating in an  
17 evaluation of legal problems. We would like to ask  
18 the Commission what it now has available in this area.

19 Would you rather I waited until the  
20 end of this to ask you these questions?

21 THE CHAIRMAN: Quite frankly, I don't  
22 know whether we have anything -

23 MR. SCOTT: I could speak to that, Dr.  
24 Porter.

25 THE CHAIRMAN: Would you like to do it  
now?





1 MR. SCOTT: Yes, sir. Should I call  
2 you Miss Montgomery or Ms. or Dolores or what?

3 MISS MONTGOMERY: Whatever you choose.

4 MR. SCOTT: Well, I would like to  
5 address you - well, all right, Dolores.

6 MISS MONTGOMERY: All right.

7 MR. SCOTT: I have in my file a survey  
8 of the available energy law that was done by the  
9 Advisory Committee on Energy plus other legal  
10 references that I would be quite happy to bring to  
11 the Commission with me and make available to  
12 interested persons.

13 I take it that the Advisory Committee  
14 on Energy does not have any property interest in the  
15 study that would prevent me from doing that.

16 Also certain studies of the Ministry -  
17 I think I may have some sources that will be useful  
18 and I will be happy to make them available.

19 MISS MONTGOMERY: Thank you, Mr. Scott.

20 In CELA's view, legal research should  
21 be done in a minimum of the following areas: A  
22 review of both Ontario and federal laws pertaining to  
23 energy matters plus an analysis of how such laws have  
24 shaped policy should be prepared. Such a review  
25 would lead obviously to a second paper on how laws  
would need to be changed to implement changes in







6  
1 policy. There should be of course a monitoring  
2 function to make sure that during the life of the  
3 Commission new developments in law will be reviewed.

4 Procedure:

5 CELA considers procedure at the main  
6 hearings to be primarily a legal issue, since the  
7 Commission is operating under the Public Inquiries  
8 Act which demand that the minimum standards of  
9 natural justice be met.

10 From the conference of possible  
11 participants at the main hearings came the following  
12 recommendations.

13 1) All hearings should be public and  
14 should be advertised with sufficient notice for out of  
15 town people to travel to where the hearings are being  
16 held.

17 2) The hearings should be held during  
18 the day and a daily transcript made available at least  
19 two hours before the commencement of the next day's  
20 session. The transcript costs for these who could  
21 otherwise not afford them would be paid out of the  
22 Commission's general budget.

23 3) Cross-examination should be allowed,  
24 both by representatives of groups, i.e. lawyers or  
25 experts, as well as by an individual from a group not  
so represented.





-37 1 4) All documents should be made  
2 available to all participants in the hearing at  
3 least a week before they were to be used and the  
4 cost of duplication above five copies should be borne  
5 by the Commission.

6 5) People in the general audience  
7 listening to the proceedings, should have an  
8 opportunity to question witnesses as well.

9 When CELA met with the Commissioners  
10 last summer, along with Pollution Probe and Energy  
11 Probe, it was clear that the Commission frowned on  
12 the use of lawyers at the main hearings. CELA is of  
13 course primarily a law organization and has grave  
14 reservations about forbidding lawyers to appear.  
15 Leaving aside any question of whether or not under  
16 the Public Inquiries Act a Commission can bar  
17 certain persons from appearing, while allowing other  
18 persons to appear, firstly, if lawyers are not to be  
19 allowed, then the Commission should be prepared to  
20 order that no group have any kind of legal counsel  
21 at all. Secondly, the Commission counsel should  
22 have and should be seen to have a duty to be neutral  
23 to all participants. Thirdly, if experts are to  
24 cross-question each other, CELA fears that the expert  
25 with the strongest personality rather than the expert  
with the best information will take precedence.





1 Fourthly, if counsel are allowed, then each counsel  
2 should have equal opportunities with the other counsel  
3 to examine witnesses and bring their concerns forward.

4 MR. SCOTT: Perhaps we might have  
5 some statement on the present intention of the  
6 Commission in this regard.

7 THE CHAIRMAN: You said it was clear  
8 that the Commission frowned on the use of lawyers at  
9 the main hearings?

10 MISS MONTGOMERY: That was our  
11 impression, yes.

12 THE CHAIRMAN: It was just an  
13 impression?

14 MISS MONTGOMERY: Yes.

15 THE CHAIRMAN: I see. And that is all?  
16 Well, obviously it has been stated on various occasions  
17 and in the speech that I gave to two Canadian clubs  
18 that the role of legal personnel in these hearings is  
19 quite central, but that they would be supplemented  
20 wherever appropriate by experts who might also carry  
21 out examination and cross-examination. And if you  
22 would like to see a copy of this, it is at your  
23 disposal. So that I think this is not an accurate  
24 assessment of the situation at all.

25 MR. SCOTT: Dr. Porter, let me add  
something? Excuse me for a moment. Dr. Porter,







-39 1 perhaps you might wish to mention about what I  
2 understand to be the Commission's policy to try and  
3 make the meetings and hearings congenial to non-legal  
4 people.

5 Now that is the policy position, and  
6 speaking for myself as a lawyer who has been involved  
7 in energy matters for some time, I think it is a  
8 great idea. I guess the position would come down to  
9 this, would it not, Doctor, if people want to have  
10 their lawyers the Commission does not intend to  
11 prevent that.

12 On the other hand, we do not wish to  
13 have the hearing dominated by lawyers. We wish people  
14 to be able to say their piece in a congenial atmosphere  
15 as much as the process will allow. Would that be  
16 fair?

17 THE CHAIRMAN: You have stated it very  
18 well indeed, Mr. Counsel.

19 MR. SCOTT: Thank you.

20 MISS MONTGOMERY: I think we would  
21 agree with that, Dr. Porter. Our concern was that  
22 people would not be represented by lawyers or that  
23 the role of counsel would really be a minimal one.

24 We have also concerns of experts  
25 cross-examining experts who had not been in a position  
of cross-examination before, and felt that lawyers have





1 training to allow them to cross-examine them and  
2 experts might not have that training.

3 THE CHAIRMAN: On the other hand,  
4 of course, some experts have the capability of examining  
5 very high levels, scientific matters as they are  
6 carried out in the examination of a PhD candidate ---

7 MISS MONTGOMERY: Yes.

8 THE CHAIRMAN:--for instance, and the  
9 examination role at the very highest level that I can  
10 imagine.

11 DR. ROSEHART: The lawyers, just one  
12 other comment, I don't like to be negative -

13 MISS MONTGOMERY: Okay.

14 DR. ROSEHART: But here you talk of  
15 the expert with the strongest personality. I throw  
16 out a challenge that I think the same thing happens  
17 with the legal profession.

18 MISS MONTGOMERY: Yes.

19 MR. SCOTT: And could I add just one  
20 thing, Miss Montgomery? The best technical cross-  
21 examination I have ever seen in my life on a  
22 difficult technological energy subject was by Jerry  
23 De Sourcy who was the adviser to the Energy Resources  
24 Conservation Board. He is now a member of the Board;  
25 an engineer by profession.

Now it was just masterful the way he





1 could frame a question, and furthermore, if he were a  
2 witness, he would be a very tough customer to tangle  
3 with. And, Dolores, I understand you are not a  
4 lawyer. Is that right?

5 MISS MONTGOMERY: Yes, that is right.

6 MR. SCOTT: Well, I can only say that  
7 the fact that you are not certainly has not hampered  
8 you in any way so far in your presentation.

9 MISS MONTGOMERY: Thank you.

10 THE CHAIRMAN: Hear hear.

11 MISS MONTGOMERY: All right. Then  
12 our next suggestion here is that we feel it would be  
13 useful in CELA's opinion for the Commission counsel  
14 to hold a meeting of the representatives, be they  
15 scientific experts, concerned citizens or lawyers, to  
16 discuss procedure and to reach agreement on how the  
17 main hearings should be conducted.

18 The Commission has floated the idea of  
19 having one designated counsel for intervenor groups.  
20 This is a good idea, CELA feels, but only so long as  
21 groups who do not like the idea will be adequately  
22 funded to make a proper presentation of their research  
23 and adequately funded to have an equal opportunity  
24 to elicit information by questioning other witnesses.

25 Above all, however, when one discusses  
procedure, it must be understood that the principle







2  
1 which must be strictly followed is that all who appear  
2 before the Royal Commission are placed on an equal  
3 footing so that it is not the situation that one  
4 participant who has no personal expertise and a very  
5 limited amount of disposable income from his salary  
6 and has a job which demands his full time is pitted  
7 against a participant with a great deal of time  
8 available, access to top experts in the field and a  
9 great deal of money to pay such experts.

10 Funding:

11 The report of the participants'  
12 meeting, October 3rd and 4th was delivered to the  
13 Commission on October 9th.

14 The funding report recommended that  
15 there ought to be two standards applied for funding  
16 participants. One standard applied to large scale  
17 organized groups who might want to be present for a  
18 good part of the hearings. To receive funding, such  
19 groups ought to demonstrate their credibility, their  
20 interest and their ability to carry on with whatever  
21 tasks they proposed. The second group should be that  
22 of individuals and new groups which may have formed  
23 simply in response to a local concern. These groups  
24 would be asked for funding proposals with very specific  
25 information as to where the money would go and how  
often and how long the groups wished to appear at the





1 main hearings.

2 It was also recommended that anybody  
3 who wanted to speak at the main hearings ought to be  
4 allowed to do so and that simply a request by such a  
5 person for travelling expense would act as a trigger  
6 mechanism to have the request for funding considered.

7 Criteria for Funding:

8 CELA agrees with the recommendations  
9 used by Mr. Justice Berger in funding participants at  
10 the MacKenzie Valley hearings. However, two  
11 qualifications must be borne in mind. The first is  
12 participants which have continuing responsibility not  
13 directed to participation in the Commission, ought to  
14 be assessed with this in mind, rather than with the  
15 idea that they should devote their total resources to  
16 the Commission. The best example for here is Consumers'  
17 Association of Canada which wishes to participate in  
18 the Commission but has a continuing responsibility to  
19 • promote consumerism in Canada. The second qualifi-  
20 cation also drawn by Mr. Justice Berger was that of a  
21 distinction between public interest groups and  
22 interest groups. Some interest groups such as the  
23 Association of Major Power Consumers can assess their  
24 members to pay for participation at the hearings (all  
25 contributions of course are deductible) whereas a  
group such as ourselves cannot assess our members (who





cannot deduct what they now contribute). These kinds of groups should be treated on a different footing.

In addition to the criteria applied by Mr. Justice Berger, CELA thinks that in this Ontario-wide hearing, special funding should be made available for a specific project such as the organization of a community and the organization of information flow among the public interest intervenors.

CELA recommends that both research and presentation at the main hearings, as well as, public education efforts be funded.

CELA further recommends that the only way to make sure the funding is independent of Government interference would be by having the funding come on a "no strings" basis through the Commission. Perhaps a committee with grass roots participation could be set up to help the Commission in assessing application. Funding through the Commission is one way of insuring participation at the hearings on an equal footing and will be a source of credibility for the Commission which has to make the final recommendations.

In its report of October 3rd and 4th, CELA also recommended that some funding be made available to pay travel expenses to the preliminary meetings.







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I would appreciate hearing the Commissioner's views, both with respect to what the brief delivered October 6th said as well as to the concerns I have reiterated here today. For example, was funding made available for people to come to the preliminary meetings? What is the Commission's budget with respect to intervener funding?

THE CHAIRMAN: At this time the Commission cannot make any announcement on this question. It does fall outside the purposes of these meetings, and I think that is all I would like to say at this time.

Funding has not been made available for people to go to the preliminary meetings.

MR. SCOTT: Dr. Porter, would it be fair to say, sir, that the question of funding is very much in the developmental stage?

THE CHAIRMAN: That is right.

MR. SCOTT: There is a lot of work to be done on it, and it is on-going.

THE CHAIRMAN: That is right. Thank you.

DR. ROSEHART: And also a comment, Dolores, your submission of October 6th was used by the Funding Subcommittee and considered in the drafting of the preliminary statement on the funding of public





-46

1 interest groups.

2 MISS MONTGOMERY: Good. I am glad to  
3 hear it.

4 Public Participation:

5 Unfortunately, the Canadian  
6 Environmental Law Association must be somewhat critical  
7 of the Commission's efforts in the area of public  
8 participation to date. Commission employees have been  
9 sent out to communities where preliminary meetings were  
10 to be held often with no more than two or three weeks  
11 lead time. Some of these people knew absolutely nothing  
12 about the community into which they were going and knew  
13 absolutely no local contact people. As a result, for  
14 a number of areas, the Canadian Environmental Law  
15 Association has borne the brunt of the organizing  
16 effort for providing names of contacts and by  
17 repeatedly phoning our local members and urging them to  
18 go out to the preliminary meetings and participate.  
19 When we wrote the Commission saying that we could no  
20 longer afford to provide this service to their  
21 employees free, the Commission Executive Director  
22 rejected any idea of the Commission paying for these  
23 services. The local organizations that CELA has  
24 established over the years have of course cost us a  
25 great deal in money and a great deal in time. While  
even after our suggestion that these services be paid





7 1 for was rejected, CELA continued to help organize it  
2 in all the communities where there were local CELA  
3 members. We must say here publically that this has  
4 strained the resources of our organization.

5 Secondly, we are concerned about the  
6 reported cut in the public participation budget for the  
7 rest of the preliminary meetings, coupled with the  
8 lack of knowledge about the local situation in various  
9 areas, the inability to hire a sufficient number of  
10 local people who could organize in the short time  
11 available, is quite a disappointment.

12 All of the participants at the October  
13 3rd and 4th meeting agreed that one of the greatest  
14 sources of the Commission's credibility would come  
15 throughout its efforts in public participation. CELA  
16 can only hope that proper attention and proper support  
17 will be given to the Commission community organizers  
18 for the future, particularly, for the main hearings.

19 With this brief and our attendance at  
20 the meetings here today, the Canadian Environmental Law  
21 Association must regretfully terminate its participation  
22 with the preliminary hearings and indeed possibly  
23 future participation with the Royal Commission. CELA  
24 has spent at least 45 person days (for which other than  
25 direct expenses for the October meeting) CELA has been  
paid a total of \$250 by the Commission. We simply









8  
1 can no longer afford to participate. In fact, there  
2 are strong views from a number of members of our  
3 Board of Directors that we should have stopped our  
4 participation quite some time ago. Fortunately, their  
5 views did not prevail during most of the organizing  
6 for the preliminary meetings of the Commission. The  
7 Association has selected the issues surrounding  
8 environmental health as its major priority activity for  
9 the next year. The time of the staff currently devoted  
10 to the Royal Commission must be transferred at once to  
11 this priority project.

12 Thank you very much for your attention.

13 THE CHAIRMAN: Thank you, Dolores.

14 MR. SCOTT: Well, Dr. Porter, I would  
15 have a number of questions for clarification. However,  
16 I do not wish to draw the proceedings out, and I am  
17 quite willing to put them in some other time. I find  
18 I can't come back this evening due to the progress of  
19 the estimates in the House. I am wondering if  
20 perhaps Dolores might have some later time to suggest?

21 MISS MONTGOMERY: I am available in  
22 my office. You are welcome to call. I am not  
23 available this evening either.

24 MR. SCOTT: The difficulty is if you  
25 and I have an in-camera session in your office, then  
everybody else in the room is obviously denied some





49 1 very useful comments on the whole process, Dolores.

2 Is there any possibility that we could  
3 talk tomorrow here, or, rather, at a continuation of  
4 the session? Or, some other time that is convenient  
5 to you?

6 MISS MONTGOMERY: Yes. I think we  
7 could probably be available tomorrow.

8 MR. SCOTT: Well perhaps we will be  
9 in touch then.

10 MISS MONTGOMERY: Okay.

11 MR. W. DILOWIE: There is a series of  
12 hearings tomorrow morning starting at ten.

13 THE CHAIRMAN: The time is very, very  
14 full for the period from 10 to 2, going right through  
15 lunch, and how much later than two we will be able to  
16 proceed is rather doubtful at this time. This is a  
17 very full program.

11/ 18 MR. SCOTT: And, Doctor, I may have  
19 problems tomorrow as well. That is what I have  
20 mentioned. I am sure we can get together some time.

21 THE CHAIRMAN: Many of the points, of  
22 course, raised in the CELA submission go far beyond  
23 the purposes of these preliminary meetings, and I  
24 don't think at this time we can spend much time on  
25 matters that are really outside our present concerns  
which are stated very specifically in the public





1 advertisements.

2 So I regret that we perhaps will not  
3 be able to do much about it although there will be  
4 other preliminary meetings - well, they continue, and  
5 distance is not too far remote from Toronto, like  
6 Hamilton when you might like to reconsider your  
7 position.

8 There are certain comments in this  
9 submission which are very questionable actually. You  
10 state, for example, the reported cut in the public  
11 participation budget. Well, that is news to me.

12 It is statements of this kind that I  
13 think are not too acceptable. Certainly not to me as  
14 Chairman.

15 MR. SCOTT: Dr. Porter, could I mention,  
16 sir, there are a number of matters, however, that I  
17 wish to discuss with Dolores that were germane to  
18 the issues that falls clearly within the terms of  
19 reference, and possibly if it is not convenient to do  
20 it on the record, if I could write you a letter with  
21 some written interrogatories, perhaps the resources  
22 of CELA would extend to answering the letter in some  
23 detail.

24 MISS MONTGOMERY: I would think so, yes.

25 DR. ROSEHART: I would like to add a  
comment: this is a meeting I believe and not a hearing,









1- 1 and at times today I think we are sounding quite  
2 formal, and I think you have raised some interesting  
3 points, and I am sure the Commissioners will take them  
4 all with due consideration.

5 THE CHAIRMAN: There is another point  
6 perhaps you raised too in connection with feedback.

7 The transcripts of all the public  
8 meetings are available in the offices of the Commission.  
9 Perhaps they should have been publicized more widely  
10 than it has been. So that you are welcome, of course,  
11 to study them. We don't have many copies because our  
12 budget, of course, is quite limited, and they are  
13 becoming already quite expensive. Therefore there is  
14 that feedback.

15 MISS MONTGOMERY: That is useful.  
16 Thank you.

17 THE CHAIRMAN: Thank you very much.

18 ----

19 THE CHAIRMAN: I thank those of you  
20 who are still with us; thank you for staying. The  
21 meeting is adjourned until 8 o'clock this evening when  
22 an informal session of the Commission will be held.

23 ---Hearing Terminated at 5:20 p.m.  
24  
25

















